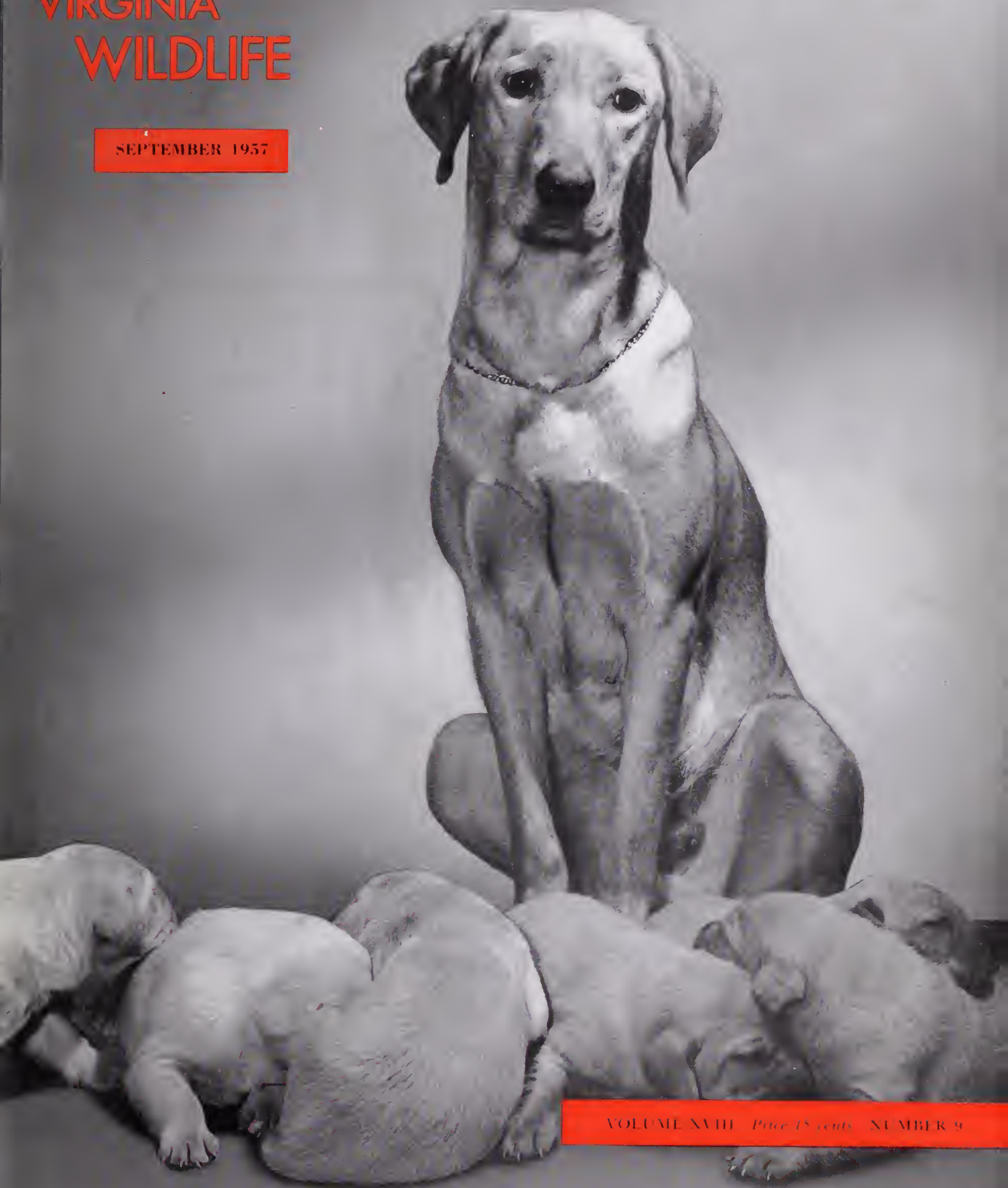


# VIRGINIA WILDLIFE

SEPTEMBER 1957



VOLUME XVIII Price 15 cents NUMBER 9



Photo by Leonard Lee Rue III

The red squirrel . . . "mountain boomer" of the highlands.



# VIRGINIA WILDLIFE

Published by VIRGINIA COMMISSION OF GAME AND INLAND FISHERIES, Richmond 13, Virginia  
*A Monthly Magazine Dedicated to the Conservation, Restoration, and Wise Use of Virginia's Wildlife and  
Related Natural Resources, and to the Betterment of Hunting and Fishing in Virginia*

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### *Cover*

This beautiful Golden Labrador, owned by C. Brown Pearson Jr. of Richmond, Virginia, watches over her litter of potential retrievers.

Commission Photo by Kesteloo

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# The Prodigality of Man

CONTRARY to common belief, nature was not prodigal at the time of creation. After heaven and earth were brought into existence, the waters were separated from the earth, and lights for both day and night were established. Then came into being the beasts of the field, fowls of the air and fishes of the waters. Last, but by no means the least, the human race was brought into existence and was given dominion and made the overseer of every living thing.

How well man has discharged the responsibilities assigned him, you may judge, dear reader. If I were to be the judge, I am afraid the sentence passed on him would be a rather harsh one. During the nearly thirty-five years that I have been an administrator of man-made laws and regulations governing the conservation, protection and development of the wildlife of fields, woods and waters, I have observed the selfish rapaciousness of man exemplified throughout the length and breadth of the United States and some of the foreign countries.

Drive along the modern highways of today and you will see grim monuments to man's stupidity. The red devil of fire has taken its toll of some of the best that has been left by the saw and axe. Too many of our once beautiful streams remain burdened with human and industrial wastes. Eroded soils fill their beds and produce costly floods. Go to our fields and woodlands, and in too many instances will you find little or no game where once there was an abundance.

True, man has begun in a feeble way to restore the forests, the virgin waters and the soil he so ruthlessly mined; but he's just scratching the surface. Human population is far outstripping man's effort and his ability to reproduce natural renewable resources.

Man-made laws too often destroy the natural laws which, if given opportunity, through the process of reproduction and growth would guarantee to the teeming millions of earth a reasonable supply of all those natural renewable resources placed here for man's pleasure and economic benefit.

Many of our natural resources are dissipated upon the altar of political expediency. Witness the conflicting legislation which has been enacted in recent years. Some of the outstanding examples of man's innate desire to do something spectacular without regard to consequences may be cited as follows:

(A) Laws enacted and large sums of money appropriated to authorize and pay for ditching and draining millions of acres of pot holes and wetlands, where ducks

and other migratory waterfowl are struggling to perpetuate their kinds, for the purpose of increasing the numbers of acres which may be devoted to raising agricultural crops.

(B) Revenues appropriated and other revenues required from the sale of duck stamps to construct pot holes and to take lands out of agriculture and convert them into wetlands for the purpose of raising ducks and other migratory wildfowl.

(C) Millions upon top of millions appropriated to pay farmers to take crop land out of cultivation.

(D) Millions appropriated to reestablish agricultural lands by methods of irrigation.

(E) Millions appropriated to pay farmers for taking land out of cultivation under the soil-bank plan, so they will not produce so large a surplus.

(F) Millions appropriated to teach farmers how to produce more agricultural crops per acre.

(G) Millions appropriated on top of millions to feed and thereby obtain the good will of the peoples of other nations.

(H) Large sums appropriated from which a million-dollars-a-day storage rent is paid for caves, warehouses and ships to store grain and other surplus food products. Why could not this food be sent to the hungry peoples of the world instead of sending them money with which to buy food from other countries?

How does all this conflicting legislation come about? Well, one set of legislators has constituents who own large acreages of wet land and pot-hole country; another set has a large number of semi-arid country landowners. Still another group has a constituency that wants to get in on the soil-bank plan, and so on. Each faction trades back and forth on the taxpayers' money. One says to the other: "I'll vote for an appropriation to ditch and drain your pot holes and wetlands if you'll vote for an appropriation to construct pot holes and build dikes for the purpose of creating wetlands for my constituency." A third group says to the first two: "I'll vote for both of your bills if you will help me get the millions it's going to take to get all of this crop land out of production." The irrigation group votes for all of the other three groups if they vote for his irrigation projects. By the time all the trades are in, a multiplicity of conflicting laws have been written into the statutes. At least, that's the way it looks from where I sit.

It may be that the lawmakers do not trade with each other, but, whatever they do, they come up with the aforesaid legislation.—I. T. Q.



# HORIZONS UNLIMITED

By R. E. ELLIOTT  
*Wildlife Staff Assistant  
George Washington National Forest*

WHEN the Cooperative Wildlife Agreement between the Virginia Commission of Game and Inland Fisheries and the United States Forest Service came into being, no one visualized the success and tremendous importance the plan would realize in the first twenty years following its conception. Making headway slowly at first—gaining momentum gradually, then at an accelerated rate of speed—it has, almost overnight, come of age.

The Commission has put into motion a capital outlay program which will spend \$500,000 on the two Virginia forests during the present two-year period. Add to this an annual average expenditure of about \$175,000 in the Pittman-Robertson program, plus expenditures of considerable proportions in fish-stocking programs of both state and federal governments, and the size of the job at the present time begins to take on immense stature.

Growth in development of the wildlife resource from almost nothing in 1937 to its present dimensions is almost fantastic. Particularly significant has been the greatly accelerated expansion during the last four or five years. When other things are considered, along with the normal trends already mentioned, the forecast for the next ten-year period seems to be best represented in the terms "horizons unlimited."

State revenues from hunting and fishing licenses, national forest stamps and from Pittman-Robertson and Dingell-Johnson funds is on a better-than-steady, annual increase. The U. S. Forest Service is anticipating a program called "Operation Wildlife," which will match "Operation Outdoors" in its significance to federal participation in wildlife work on the national forests.

The impact of all these developments on the management of other resources on national forests in Virginia will be strong. Water, being the most important of these and the one most affected by management methods of the others, is the one held by national-forest land managers to be the key to success or failure in the over-all program.

Some people feel there is a direct conflict between timber and wildlife but the truth is that a correlation of the two is practical and obviously desirable. The secret lies in wise planning for both when timber marking and harvesting begins. We lack some of the guides but have sufficient direction to make an intelligent start in the right direction. Studies are being made on this most important phase of forest management, and directives of real value are expected soon.

"Operation Outdoors" promises to double the capacity of the recreation facilities on the two forests in the next



Commission Photos by Kestelo

Some people feel there is a direct conflict between timber and wildlife, but the truth is game management and timber management can work together. The secret lies in wise planning.



Change is always a necessary by-product of progress. On the national forest, no change which does not have the backing of research and study is ever suggested.

five years. A direct unification of effort between wildlife and recreation is needed here to avoid duplication in the establishment of areas attractive to sportsmen.

Grazing is generally a relatively minor problem on the forests, but it must be considered wherever grazing permits are still in existence.

Never has there been or will there be a greater need for concerted action between and within agencies. The cooperative agreement has come through its trial period with great success, and it is the feeling of all concerned that the foundations for this greatly accelerated program have been well laid.

There are two main phases of wildlife conservation and development work which must be tied together in such a way that each becomes a part of the other. Wildlife conservationists are working towards one common goal, the production of more game and fish for sportsmen and fair distribution of this game and fish, within limits of availability, to all. The work of technicians, game managers, and game wardens is designed to build towards this objective. The technician studies the needs, based on living habits of fish and game, and, with the help of the game manager, goes about the job of providing these needs. The game warden is the sportsmen's best friend. Working within the framework of a set of rules known as "fish and game laws," it is his job to see that everyone gets a fair and equal chance to harvest his share of the legal kill or catch. These rules are set up after careful study by all people concerned with wildlife conservation—technicians, game managers, game wardens, forest officers, members of the Commission, and groups of representative sportsmen. Anyone who disregards them does not play fair with his fellow hunter or fisherman. It is always surprising to find that sportsmen do not look on a violator with disfavor but will often cover up for him. He should be considered the honest sportsman's worst

enemy. It seems only right to believe that he should be driven from the hunting and fishing grounds and barred forever from association with those who love fishing and hunting as sports which have been provided for the pleasure and enjoyment of all, not for the favored few who steal and cheat.

Because of the tremendous implications of greatly increased activities on the national forests, there are bound to be necessary changes in wildlife management practices and in fish and game laws. Change is always a necessary by-product of progress. Some of these changes will be difficult for the average sportsman to understand; thus, a vigorous educational program will be maintained. This program will be directed mainly towards an explanation of the reasons for game and fish law revisions. Population trends, forage and sex-ratio studies, carrying capacities of land and water, and other tools of the wildlife expert must be understood to rightfully judge the wisdom of laws and methods. No change which does not have the backing of research and study is ever suggested.

For this reason, the sportsmen must be kept informed. An uninformed public, or worse still, a misinformed public, is a difficult power with which to deal.

The program has come to full vigor on the national forests and its blooming and final fruiting will be fascinating to watch. With the concerted, unified, and coordinated effort of all, development of the wildlife resource on the national forests will be brought into its rightfully allotted place in the general scheme of resource management, with happy results for everyone. It has become recognized as a leading source of revenue in Virginia and its ability to provide healthful, outdoor recreation for thousands is an accepted fact.

We can look back on the past with satisfaction. We look forward to the future with eager anticipation.



Wildlife conservationists are working toward one common goal—the production of more game and fish for sportsmen. This habitat development work (left; a water hole; middle, a wildlife clearing; and right, a wildlife trail) on the national forest is a tool to accomplish this end.





Commission Photos by Kesteloo

The most coveted award for a scout at Shawondasee is to have a permanent imprint of his palm imbedded in concrete in the honor Court of Palms. Only 144 boys have received this honor since it was started in 1933.

# SCOUT CAMPS

*around*

## RICHMOND

By JANE M. CONE  
*Editorial Assistant*

JUST a few miles from Richmond, there are two scout camps for boys and girls as well equipped and as excellently staffed as most of the expensive and privately owned camps in the country. The directors of these camps have had to go through a rigorous training program to be considered qualified to guide these eager youngsters. Both camps are located in Chesterfield County. Camp Pocahontas, the girl scout camp, has 88 wooded acres near Bon Air, Virginia. Camp Shawondasee, for the boy scouts, borders on Pocahontas State Park and has 96 acres for the camping site and a 15-acre freshwater lake. For wilderness camping, the boys use 900 acres leased from the neighboring state park. They also have leased 265 acres from the Buggs Island area and 31 acres from the Long Mountain Wayside along the Appalachian Trail.

The land for Camp Pocahontas was purchased twenty-six years ago by the girl scouts. It has a spring-fed lake which is used for boating, swimming, and instruction in Red Cross lifesaving. For outpost and wilderness camping the girl scouts take their own tents to Lake Sherando, on the Appalachian Trail, and to Shangri-La, the lovely home of Pearson Wells, on the Rappahannock River.

Geographically, both camps are ideally situated for scout training. There are enough primitive and unexplored forests to stimulate studies of nature and wildlife; yet, for the beginning camper, the accommodations are comfortable and civilized. There is some difference in the eligibility for attendance at the two camps. It is not necessary to be a girl scout in order to go to Camp Poca-

hontas, but the units that use Camp Shawondasee must be made up of scout troops in and around Richmond. Miss Virginia Denn, director of Pocahontas and familiarly known as "Stretch" to the campers, said proudly that there are few girls not scouts on arrival at camp who do not become scouts when they leave.

The unfortunate drawback in these two existing camps is that the time is limited for camp life because of the heavy demand to attend the camps. The camp period at Pocahontas lasts two weeks and at Shawondasee for one week only. Sometimes, if there is a withdrawal, a boy or girl can extend the regular camp session.

The program followed at Pocahontas is the Girl Scout Unit Plan, under which girls are placed according to age, school grade, camping experience or special interests. Each unit plans its own activities with guidance from the counselors. This is unlike a private camp where they must follow a schedule laid out for the whole camp. There are sixteen to twenty-four units, with one adult as leader to six children. The brownie group has girls aged 7 to 9. At Pocahontas they are known as the "Windy Top" group. The next age group is from 9 to 11, and they live in the "Southern Pines" area. The "Sawahgo," a name concocted from letters of the trees that grow in their section of camp, includes girls from age 10 to 12. The bugler, who is the director, awakens the whole camp at 7:00 a.m. to start a day full of fun, fellowship and exploring in new fields of knowledge. Depending on scout rank, the girls work out their daily activities to acquire certain skills necessary before succeeding to the



next rank. They include firebuilding, outdoor cooking, hiking, handicrafts, swimming, square and folk dancing, nature expeditions, knotcraft, and many others. The Pocahontas campers are particularly interested in nature study and conservation. The nature counselor, who has a degree in biology, has set up a nature museum. The girls make leaf prints from leaves collected on nature hikes and participate in leaf "bees," a variation of the spelling "bee," only the contestants must identify leaves rather than spell words correctly. Trees have been labeled with tin-can tops and the name of the tree is painted on it with fingernail polish, one of the few feminine motifs displayed about this girls' life in the wild. It seemed incongruous to see an attractive girl holding a snake field-guide book in one hand while she pinioned a wriggling snake with the other. She would neither kill the snake nor let it go until she had made

identification. Always in use at Pocahontas are field-guide books from the Wildlife Management Institute on insects, mammals, reptiles, wild plants, and flowers.

In the demonstration area, the author was fascinated with an ingenious arrangement for cooking with a tuna-fish can. It is cozily called a "buddy burner." On top of the small circular tin, which contains paraffin or a candle, encircled by corrugated paper, is placed a size ten can, punctured with holes on which to cook. Besides all the different types of fires, (the basic "A" fire, the tepee or wigwam fire, and the crisscross fire), there was a complete kitchen made from lashings. In the out-of-doors, when nails and hammers are not available, a knowledge of lashings is indispensable. The Pocahontas girls had made a garbage disposal, a dishwashing corner, and many utility tables and seats. Employed in making these articles were three types of lashings: square, sheer or round, and continuous. The sweet gum trees had provided lashings for the conservation reason that they grow more abundantly in that area than other trees.

Certainly these girls take care of themselves physically and spiritually. A hike of twenty-three miles in the mountains is a feat that not many men can undertake, but a group of Richmond girl scouts, age 14 to 16, considered it just another scout activity. Spiritually, Camp Pocahontas instills in each camper, no matter what her denomination, a sense of integrity. There is an unexplained light that always shines on the "Friendship Tree" where the campers meet for quiet, inspirational talks. It is at the end of the Friendship Trail and no matter what the time of day, whether the sky is clear or cloudy, this unnatural light illumines the devotional tree.

Helping Lord Robert Baden-Powell to organize the boy scouts in England, in 1908, was Juliette Gordon Low from Savannah, Georgia. In 1912 she returned to the States and began the Girl Guides of America, which later became known as the Girl Scouts of America. Almost immediately, in 1910, after Lord Baden-Powell excited thousands to the Scouting movement, William Boyce, of Chicago, founded the Boy Scouts of America. Being a boy scout in England commands a great deal of respect and prestige, as was remarked a year ago, when the Queen of England received at Windsor Castle boy scouts from all her dominions and presented them with medals for their achievements. They represented every race and creed in Her Majesty's kingdom. The international Friendship of Scouts is indeed a basis for peace and understanding. There are arrangements for scouts to exchange camps in countries that the individual scout might never have an opportunity to visit otherwise. Camp Pocahontas has had exchange scouts from Denmark, Germany and Belgium.

In 1912, a few enthusiastic Richmonders founded Camp Shawondasee, only two years after the Boy Scouts had been organized in the United States. It is a unit camping reservation where an experienced camp staff is available to assist units in developing and scheduling the camp programs. At the close of each weekly session, the units join together around a campfire for recognition



Most of the campers became deft at handling canoes and boats while at camp. With the growing number of boating accidents in Virginia waters, this is an excellent safety precaution.



At Pocahontas the girls have constructed an outdoor kitchen using rope lashings. Not a nail was used, and this kitchen area is complete and comfortable.



and awards. Although strictly a camp site, the guiding spirit of the camp staff unites all the boys as an entity, not allowing them to remain separate from each other as a unit. Herbert Coleman, the earnest young director, said that the boys were there for three specific reasons: character building, citizenship training, and physical fitness. The youngest members in the boy scout family are the cub scouts, which range in age from 8-11. Shawondasee only takes the boy scouts and the explorer scouts, which is for boys in ages 11-18. If for some reason the scout leader of a troop cannot attend the camping period, a provisional scout leader is put with the unit. All of the leaders were participating in an aquatic meet when a visit was made to the camp, and it was very obvious that a warm camaraderie exists between the boys and the staff. Swamping the canoes (two canoeists deluging each other's canoes with buckets of water until one becomes submerged) was enjoyed as much by Coleman and his assistant as it was by the spectators, although the director was the target for the sport.

One of the most important things that the younger boys learn at Shawondasee is the "shirt rescue" from drowning. Eight boys demonstrated this method of life-saving, which is simply throwing a shirt lifeline to the one in distress and towing him into shore. The speed with which the four lifesavers disrobed and swam to the victims was very cheering. All of these apparently playful activities are seriously recorded for each scout, to count on his merit badges. The nature instructor, Linton Leary, is obliged to instruct each unit an hour and a half daily, whether on a nature trail or studying bird identification in the nature lodge with the bird panel he originated himself. For conservation and nature badges, a boy scout must be familiar with forestry, soil and water conservation, wildlife management, and nature and astronomy. To work on or complete other merit badges at the camp, he might include camp craft groups, outdoor sports, aquatics, arts (woodcarving and Indian lore), personal development or personal fitness, public service—which is first-aid and health—communication, building (metal and wood work), and craft collections, (basketry and leatherwork). Compass work, mapping, tracking, stalking and axemanship are all a part of the troop activities. An army sergeant from Fort Lee instructs in firearms. He admitted that the requirements for the Boy Scout Merit Badge in Riflery are more stringent than for the U. S. Army. Camp Shawondasee belongs to the National Rifle Association.

At the Thursday night campfire, all the units meet to watch the Indian ceremonies staged effectively by the explorers. There are several wigwams for a stage setting, and when the painted Indians come whooping and hollering from the woods, it seems very real, especially when they perform the ritual snake dance with live snakes. Many visitors attend these performances, regardless of any attachments at the camp. Friday nights, the director and staff present the Camp Shawondasee honor awards. The Camp "S" Award is given to a scout who must live the scout oath and law, take part in a camp im-



The "Friendship Tree," where the campers meet for quiet, inspirational talks, is always a popular spot and marks the beginning of the Friendship Trail.



Water safety and first aid are important phases of the scout camp program. Many times first-aid lessons learned as a scout have, in later years, helped save a life.

provement project, display satisfactory advancement in the scoutcrafts or one merit badge, achieve satisfactory daily inspection reports and participate in camp activities including the day hike. The most coveted award is the scout whose palm is imprinted in the honor Court of Palms. Started in memory of Charles L. Weaver, former scout executive of the Robert E. Lee Council, 144 have won this honor. It is given in recognition of scouting spirit and ability, with emphasis on service to fellow scouts. A national award is the Order of the Arrow, for outstanding ability in scout crafts and skills.

Scout training develops fine young people, healthy in mind and body. But there are many who would like to belong to the scouts and have no one to lead them as a troop unit. It is a reasonable conclusion that many wars would be averted and there would be better understanding between nations if every country made scout training and thinking more widespread in future generations.



# BOWHUNTING IN VIRGINIA

By BILL COCHRAN  
*Virginia Bowhunters Association*

SINCE its modern revival, the growth of bowhunting in Virginia has been tremendous. A few years back it would have been a difficult task to find more than a dozen active bowhunters in this state, but recently virtually thousands of men and women have turned this ancient art of survival into one of the fastest growing sports in Virginia.

The same holds true in nearly every state across the nation. Last year, bowhunting was a legal method of taking game in forty-six states, while nearly forty of these provided a special hunting season exclusively for bowhunters. Wisconsin and Michigan boast the largest number of bowhunters with over thirty and forty thousand respectively. Although Virginia bowhunters do not equal these numbers, they are rapidly doubling their number as every season finds hundreds of new bowhunters going afield. Many of these newcomers are hunting for the first time while others were devoted gun hunters until they were converted to the ranks of bowhunting. Perhaps they chose bowhunting because of the early season, hunting safety, or less crowded hunting conditions. But, more than anything, it was because of the great challenge of taking game on a more equal basis between hunter and hunted, as offered by the bow — the true beauty of bowhunting.

With a growing population and increasing interest in outdoor sports, bowhunting may have a vital part to play in the future of hunting. Last year, during Virginia's ten-day bow season, 129 deer were taken by bowhunters. This is proof that a large number of bowhunters can enjoy some of the most wholesome recreation without seriously depleting the supply of game they hunt.

The modern bowhunters' equipment is far superior to any ever produced. The crude bows of yesteryear have

been scientifically developed into modern mechanisms that will cast razor-sharp broadheads at tremendous speed, resulting in deep penetrations and quick kills. A few people, who are unfamiliar with this modern equipment, have been concerned about its killing capability, but wherever careful research has been conducted it is found that bowhunters leave considerably fewer wounded deer in the woods than rifle hunters. This fine record, proving the bow to be both a humane and efficient hunting weapon, has

resulted in the expansion of bowhunting seasons in many states, including Virginia. This season, Virginia bowhunters have the opportunity to test their skill on bucks and does from October 15 to November 1 inclusive, and they may also hunt with the bow during the general open season.

There are no restrictions as to the type of equipment the Virginia bowhunter can use other than the regulation against the use of crossbows and poison arrows; however, when hunting, one should always use a bow with all of the extra margin of killing power that can be skillfully handled and one should always carry razor-sharp broadheads.

Although the history of bowhunting dates back thousands of years, the modern bowhunter is a product of our generation. He has

set his sights high and seeks more from his hunts than the satisfaction of a kill. He also enjoys the pleasure of using his woodlore and working for his game by long hours of waiting and stalking. It is his privilege to seek the solitude of a woods not crowded with hunters or to choose pleasant companions with similar aims and enjoy the flora and fauna of the out-of-doors. With the quietness of his bow he can soak in the beauty of nature and rightfully feel a part of her. Although the amount of game he brings home may not always be great, his thrills and satisfaction are incomparable.



Commission Photo by Kesteloo

A special hunting season has been set up each year in Virginia for bow hunters only on the Hog Island State Waterfowl Refuge. This year the dates are during the weeks of September 23-28 and September 30-October 5 for hunting deer of either sex, raccoon, fox, crow and opossum.





Part of the enjoyment of bowhunting is derived from discussing equipment, stalking techniques and other facets of the sport with fellow archers.



There are many women bowhunters in Virginia. A number have taken deer successfully; several have made multiple kills.

EDITOR'S NOTE: Dates have just been announced for a special deer hunting season for bow only at the Hog Island Waterfowl Refuge. They are during the weeks of September 23-28 and September 30-October 5, all dates

inclusive. Hunting will be by special permit only. Applications will be received until September 5 by the Richmond office of the Commission.

## History of the Clay Pigeon\*

By DAVE HENRY

THE clay pigeon is 75 years old this year, according to those who delve into such things, but trapshooting was a well-established sport way back many years ago. The poet Homer, who lived 3,000 years ago, wrote about how the warriors and hunters used to keep in practice by popinjay shooting; that is, shooting at a captive dove with a bow and arrow. Up through the Middle Ages the sport, with some variations, was still popular. Usually the target was a stuffed parrot mounted on a pole, but sometimes live birds were used as in the days of Homer. On this side of the Atlantic, the nearest approach to this type of shooting was in frontier days when settlers shot at a turkey gobbler's head whenever it foolishly stuck its head through a hole in a barrel. The last popinjay shoot was held in England and was more for a laugh than anything else since the gun had long superseded the bow and arrow.

In the early 1800's the smooth-bore muzzle loader had been developed to the point where it was more of a pleasure than a danger to use, and the landed gentry kept in practice during the off season by shooting at free-flying pigeons. The first trap-shooting club was formed in 1832 and was given the odd title of "The Old Hats Club," because the pigeons were covered with old top hats until the shooter gave the word. Then the attendants yanked the hat off by means of a cord and away went the bird.

Because of the abundance of game on this side of the ocean, trapshooting did not make its appearance as early as it did in England but it became popular very quickly.

Passenger pigeons, which were once here in tremendous numbers but are now extinct, were used in the shoots. At one shoot held in New York, 35,000 were killed. Shortly after 1900 live trapshooting was banned on humanitarian grounds. Some extremely weird substitutes were dreamed up until the present clay pigeon was invented. Glass balls were the first in the field, and inventors let their imaginations run riot as they worked on suitable substitutes for live birds. Some of the glass balls were plain and others were highly colored; some were corrugated while others were stuffed with feathers which scattered in what was supposed to be a realistic way when struck. One fanciful design which is reported to have found favor was a rubber balloon, which was fitted into a cardboard collar. Still others gave forth a flash of light or a puff of smoke and there were artificial pigeons, a steel facsimile of a bird that ran along wires.

The daddy of them all was invented by two Englishmen. This masterpiece was a pigeon-shaped metal target with a wire-basket body and folding wings. An inflated balloon was used to keep the wings up and a hand crank moved the bird along a wire. The gunner took his shot. If he missed, the pigeon kept on going, with its wings up. If he scored a hit, the shot deflated the balloon and the wings dropped.

The clay pigeon of today is not a pigeon at all and it is not made of clay. It is usually manufactured from a mixture of molten pitch and powdered limestone and it has reached its present state of perfection after some thirty centuries of evolution. But there may be changes yet and we still might see some weird and wonderful devices brought out to be fired at by shotgun enthusiasts.

\*Courtesy British Columbia Game Commission, Jan. 1957 issue of *Wildlife Review*.



# THE CITY SLICKER AND THE COUNTRY SQUIRREL

By GERTRUDE CURTLER  
*Former Editorial Assistant*



EVERYONE was surprised when Mary Mallam moved to the country after her husband's death. Her friends said she wouldn't like it because she'd lived all her life in the city and therefore would never get along with her country bumpkin neighbors. What Mary said was she wanted to be where she could see trees and open spaces and have a garden . . . and that she could get along with anyone.

The little house she found was exactly what she wanted. It was on a tiny patch of land which had once been part of the Barretts' farm, and her backyard was a little woods. She loved that woods. There were more trees in that little woods, she used to say, than in the whole park in the city from which she'd come. There were squirrels in them, too, which she liked to watch from her back porch. Whenever she went into town she always brought back peanuts or popcorn for those squirrels.

As for the Barretts, they turned out to be extremely nice neighbors. There were just two of them, John Barrett and his youngest boy, Tommy. John had two other sons who were grown and living upstate, and his wife had died a good many years ago. He was a tall spare man with a weatherbeaten face and bright blue eyes. Quiet, slow, and silent. There were deep wrinkles around his eyes from squinting into the sun or from smiling . . . Mary wasn't sure which. Anyway, he didn't act at all the way her city friends had told her country neighbors would act. He was real friendly and helpful. First day she moved in, he came over and insisted on pushing the furniture around for her. Said it wasn't woman's work. And Tommy came too. He was an open-

faced little eleven-year-old with a liberal sprinkling of freckles across his nose and the same startlingly blue eyes as his father. He was full of questions and comments about everything, and more than made up for his father's lack of talk.

She liked them both and was grateful for their help. John gave her some little fruit trees for her garden and she noted that he and Tommy planted them exactly the way it said in the book to plant them. And Tommy helped her put in some bulbs and roots for the following spring (it was September when she moved in) and to sow some Sweet William seeds.

When her old car conked out, the Barretts drove her into town for groceries and to church. Then, after it was fixed, they still stopped by every Sunday to take her to church. There was no sense in two cars going to the same place, John said. The more she saw of John the more he talked . . . and the better she liked him. He'd been so long without a woman, she told herself, that he needed a bit of thawing.

But then, suddenly and unexpectedly, a facet of his nature which she had never suspected came to light. Once she saw it, she knew she no longer wanted to thaw him. He could stay frozen for the rest of Time, for all her concern.

It happened in the fall at the beginning of the hunting season. Of course the whole idea of hunting horrified and disgusted Mary. She had always been fond of dogs and cats and she thought wanton killing of animals just for the thrill of the kill was sadistic, prurient, and deeply to be deplored. Sometimes she would hear shots from the deep woods across the road, and occasionally she



saw hunters in loud jackets drive by her little house. Sometimes she could even see their guns and hear their cruel lustful laughter.

Every time she saw hunters she thought of the squirrels in her backyard and was glad that it was posted land. Since that little woods belonged to the Barretts, she was sure the squirrels were safe. But then one day she heard shots in that very woods and, running from her garden, was just in time to see John and Tommy picking up three limp furry bodies.

"Oh no!" she cried out in horror. "You didn't kill those squirrels!"

"We sure did, Mary," John answered, just exactly as if he wasn't even ashamed. "That's the point of huntin' . . . to kill what you're shootin' at."

"You *hunt*?"

He nodded, grinning. "It's my favorite sport."

She shook her head, baffled, and deeply disturbed. "And you're even teaching Tommy to hunt too. I can't understand it; you seemed so . . . so nice!"

"If I was nice before, I'm still nice," John said. "There's nothing wrong with hunters, Mary. That is if they know about guns and huntin' laws and. . . ."

"Hunting is cruel!"

"No it's not," he protested mildly. "Being city-bred, you just don't know anything about it, that's all. In a way, huntin' is kind. You see. . . ."

"Kind?" she cut him off. "You stand there with the blood of those little helpless creatures on your hands and try to tell me that murdering them was kind? Why, John Barrett, I think you're the most despicable man I ever met!"

"No, Mary," he persisted. "it's just that you don't understand. . . ."

"Then I don't want to understand!" she cried, almost sobbing now, she was so wrought up. "And I don't want to ever see you again either. Now get off my property and stay off!"

Tommy's eyes grew big and round. "Does that mean me too?" he asked.

She turned to look at the child. "I don't know," she hesitated. "No, not you, Tommy. You're too young to know any better."

Next morning she felt cross and everything she looked at irritated her. She shifted all the furniture in the living room, then decided it was better the way it had been before, and shifted it all back again. Then she went outside and decided the fallen leaves on her tiny front lawn were messy, so she raked them all up. When her place was all cleaned up she looked at the Barrett property edging it, and it was really a tangle. There was a little fence between the two properties, and, on the Barretts' side, thickets, vines, bushes and even little trees were growing all jammed against each other.

How untidy, she thought to herself; how unsightly and ugly. Why, if all that mess weren't there she could plant hollyhocks against that fence and they'd look so pretty . . . but they wouldn't look like anything against that background. For a moment she just stood there scowling

at the thick underbrush, then she darted into the house for a rake and her sturdiest gardening gloves.

She had hardly begun . . . and it was tough going . . . when she looked up and saw John Barrett. He was wearing his most battered farmer's hat and sucking on a pipe. He didn't say anything but his blue eyes twinkled as he slowly shook his head at her.

"I know I'm trespassing," she said, "but I want to plant hollyhocks on my side of the fence next year and all this stuff of yours will choke them out. You don't mind if I clear this out for you, do you?"

"Yes," he answered gently, "I do mind."

"But why?" she demanded. "This stuff isn't doing any good to anybody. By clearing it out I'm doing you a favor. You should thank me."

"You're not doing the rabbits a favor," he drawled, "nor the quail, nor the field mice."

"What are you talking about?"

"You're destroying the homes of lots of little animals," he told her. "All the rest of my farm is cleared for the crops, but whenever I plow I always leave wide strips along the fences for all the little animals."

With narrowed eyes she studied him for a moment; then she laughed. "Yes, you sure do love the little animals," she jeered. "I know how much you love them. . . . I saw you killing them yesterday."

"You could call it killing," he said, still in that lazy unperturbed drawl of his, "or you could call it harvesting. I'd like to explain it to you. . . ."

"Don't bother," she said, picking up the rake and climbing back to her own side of the fence. "And don't worry. I won't trespass on your property again."

Late the following afternoon, while she was thinning out her Sweet William plants, Tommy came over. He was carrying a big bunch of broccoli . . . probably a peace offering . . . but he let it drop as he stared at the plants she had tossed into a peach basket.

"Why are you digging up all your flowers?" he asked.

"I'm not; but so many plants have come up that they're choking each other out," she explained. "If I just left them I'd have just a few scrawny flowers next spring. What I'm doing is giving each plant plenty of space so it can be healthy and flourish. You call this 'thinning'."

"Oh." Tommy kicked one sneakered foot against a rock. Finally, "I don't think you should be so mad at my daddy," he said.

"Well, maybe you're too young to understand. But I'm afraid your daddy's cruel."

"Aren't you cruel too?"

"Me? Of course not!"

"I don't see why not; you're doing the same thing my dad was doing . . . only you're doing it to flowers and he was doing it to animals. You call it thinning and he calls it harvesting."

"Oh now Tommy!"

"Yes, Mrs. Mallam, really! You see, there are too many squirrels in that wood. We had to eliminate some so that the rest would have enough room to live and

(Continued on page 22)





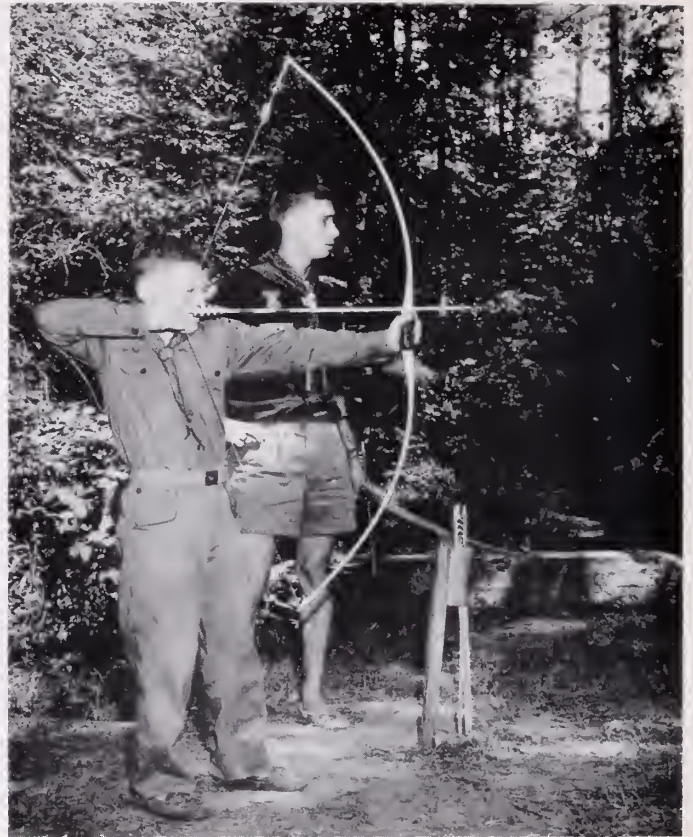
Lifesaving is an important course at both boy and girl scout camps. To go far in some phases of scouting, learning to swim is a must.



Water safety with different types of boats is included in scout training. Wise use of boats may save a life.



Instruction on the rifle range teaches the boys to respect all guns and to handle them safely.



Instruction in archery is available at camp. It is a popular sport with a majority of the campers.

## *SHAWONDASEE...*

The Robert E. Lee Council boy scout camp. Scouting has a tremendous appeal to youngsters and these pictures portray some of the activities that take place at a well organized and properly staffed camp.



All young people are interested in nature and a bird nest, found on a nature hike, always creates excitement.





The camp director demonstrates one of the methods of building a fire during a class in outdoor cooking.

## POCAHONTAS...

The Richmond area girl scout camp. Here expert leaders give healthful, invaluable training that will make living more enjoyable for girl scouts. These pictures tell a story of the diversified training.

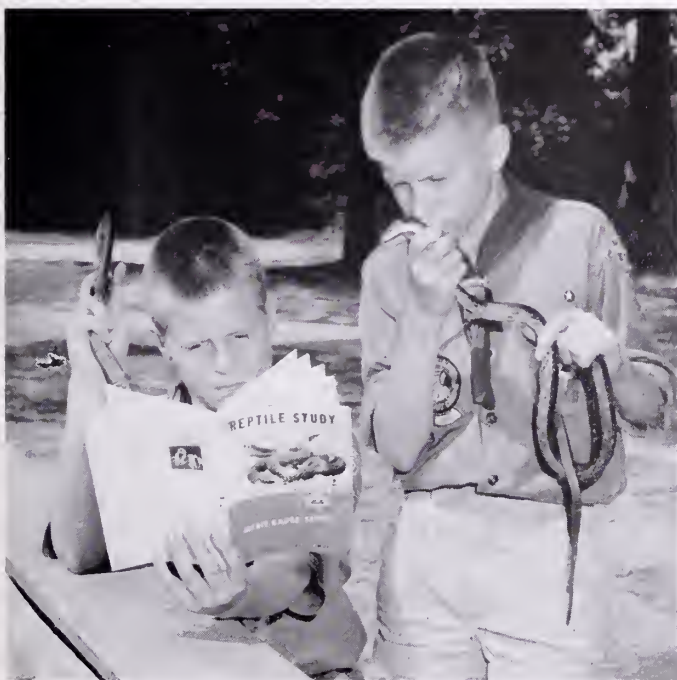
Commission Photos by Kesteloo



These girls are participating in a leaf bee—a game involving leaf identification rather than the spelling of words.



Classes in first aid are offered throughout the summer camping period and most scouts show a great deal of interest in this course.



Many of the common fears of snakes are forgotten when scouts earn a merit badge on reptiles.



A phase of nature study includes the making of leaf prints of our more common forest trees.



# "DOVEITIS"— A Contagious Hunters' Disease

By HOWARD L. SHELDON  
*District Game Biologist*

IT is the expectation of the Virginia Commission of Game and Inland Fisheries that more hunters will be stricken this fall than any previous year with the highly contagious disease known as "doveitis." It can be very serious, but seldom fatal. The hunter is exposed to the disease as a result of reading articles on dove hunting or listening to hunters who already have "doveitis" tell of hair-raising shoots. To date, there is no immunization to this disease once it is contracted. It is seasonal, as are many other sicknesses, and reoccurs each year in the early fall.

Symptoms of the disease begin showing up early in August. These are rather unusual when compared to other medical ills. Some symptoms are as follows: driving along secondary roads in mid-August watching for concentrations of doves; inquiring among farmers to find out what cornfields will be picked early in the season; commenting on the unusual abundance or scarcity of doves in certain areas; buying a considerable amount of ammunition; and oiling the favorite shotgun. These are the most common—others may occur.

There is no cure for the disease, but there is also no suffering; so if you have contracted it, or if you have been exposed to it, don't fight it—enjoy it!

Now that we know all about the disease, except the cure (and we're not worried about that), let's look into the history of "doveitis."

The hunting of mourning doves has been very popular in the southern states for many years. Because of the increasing popularity of the dove as a game bird and



Commission Photos by Kesteloo

A complete cure for "doveitis" is unknown. This malady can be greatly relieved, however, by numerous trips afield during the dove season.

also as a song bird, as many of us know it, the United States Fish and Wildlife Service became very concerned about the welfare of this bird. In 1949 the southeastern states organized a Cooperative Mourning Dove Investigation Project, under the direction of the Fish and Wildlife Service, the purpose being to keep a close check on the dove population and to manage it in such a way that a large shooting population could be maintained. Management techniques resulting from research on this project have been successful. The dove population has increased over the annual harvest to such an extent that this year the eastern states are enjoying a longer season and an increase in the daily bag limit.

Frank A. Winston, wildlife biologist with the Florida Game and Fresh Water Fish Commission, did an extensive four-year study on the mourning dove. He came up with the conclusion that, with our present regulations, hunting has no effect on the dove population from year to year.

The need for wise management of the mourning dove is very important when we consider that each year more doves are being killed than any other species of migratory game birds. The 1955 estimated kill of 19 million exceeds the estimated kill of all ducks, for the same year, by four million. When we further consider that only 29 states had a dove hunting season in 1955, its importance is increased more. As an example of the increase in hunting pressure, the 1949 hunters' kill was estimated at only eleven million. There are several reasons for this increase in the annual kill of doves. First, the in-





Photo by Leonard Lee Rue III

Wise management of this bird will insure a future crop for later generations to enjoy.



Commission Photo by Kesteloo

Dove hunters usually pick the edge of a cornfield for their shooting positions. It is important that the hunter return all bands found on doves bagged.

creasing hunter population demands more game. Second, the dove season opens before other hunting seasons, thus relieving stored-up energy in the hunter. Third, very little equipment is necessary; a gun and a good supply of ammunition is all. Fourth, doves tend to concentrate in small areas. All these, coupled with the fact that the dove is a fast flying, highly maneuverable target, make it a much pursued game bird.

When the Cooperative Mourning Dove Investigation Program was organized, one of the objectives was to devise a census method for doves. A second objective was to band as many doves as possible. The first objective was accomplished; a census route was standardized. This is a measure of the spring population on the breeding areas. It is compared with the census of the same route the preceding year, and a decrease or increase in the breeding is determined. Six hundred fifty-six such routes were censused in 44 states in the spring of 1956.

The dove-banding program has been very successful.

Since 1949, approximately 100,000 doves have been banded. Approximately 3.7 percent of these doves have been recovered. The recoveries supply information as to when and where doves migrate. Besides this, dove flyways can be determined to aid management. Hunters have reported nearly 90 percent of all band recoveries. This is *your* phase of dove management, hunters. If you kill a banded dove, report it immediately. Don't carry the band until it is lost. Information obtained from the spring census and band recoveries is used in setting the season and bag limit. This year we are enjoying the results of wise mourning dove management.

With the September 16 opening of dove season close at hand, I would like to extend a good-luck wish to all old and new victims of "doveitis" for a season of fine hunting this year. To those shooting doves for the first time, I hope you thoroughly enjoy yourselves and, remember, it is sometimes best to measure your success by the amount of ammunition you use rather than the amount of game in the bag.

### Things You May Not Know

The common field mouse is short lived. Only the hardiest live more than a year.

Snakes do not have eyelids. Even when it's asleep, a snake's eyes are wide open.

Beaver in captivity have been known to live 19 years.

The raccoon's sense of smell is not as well developed

as its sense of touch, the latter being especially good in forepaws and nose.

The weasel doesn't suck blood, as commonly believed; it does kill more than it can eat at once, but such food is usually stored for future use.

Except in winter the otter eats far fewer fish than commonly believed and those eaten are mainly non-game species.



Commission Photos by Kesteloo

An extra bonus of year-round fishing in impoundments is that fishermen tend to catch larger bass during the spring months that were formerly closed to fishing.

# ALL FISHED OUT...???

By R. G. MARTIN  
*Assistant Chief, Fish Division*

ON January 1, 1954, the Commission of Game and Inland Fisheries abolished traditional closed seasons on bass in impoundments statewide.

Fishermen generally were in agreement with the position taken by the Commission, but healthy differences were apparent at public hearings held prior to the adoption of the proposal. Many anglers thought that nesting bass would be especially vulnerable to angling during the spawning season. The fear that fishing during the spawning season would take all the "brood stock" was voiced, and dire predictions of "fished out" lakes were prophesied. According to some, bass reproductions would be as scarce as "hen's teeth." Others believed that fishing pressure would increase to phenomenal levels.

Fish technicians, on the other hand, were quick to point out that bass, as do all fish species, possess a tremendous reproductive potential. For example, a two-pound bass can lay as many as ten thousand eggs a year. A single female bass in a one-acre farm pond could produce enough progeny so that, if all eggs hatched and all fish survived for three generations, there would be

enough one-pound fish to make a heap 700 feet high covering the original one acre! This is an impossible analogy, of course, because nature would never allow such survival rates, but it does point out the obvious fact that fish are prolific and little protection of spawning stocks is needed.

Also, preliminary experience with year-round fishing at Back Bay in Princess Anne County and Claytor Lake in Pulaski County had proven satisfactory and the Commission felt entirely justified in liberalizing the closed season regulation.

As a precautionary step, the Commission authorized a continuing study of the effects of year-round bass fishing. This investigation was set up within the framework of the state's Dingell-Johnson program.

Four diverse impoundments, ranging in size from 140 to 2800 acres, were set up for study. These ponds were located in each of the three major geographic areas of the state—the piedmont, mountain and coastal plain. Carvin Cove Reservoir, 650 acres, located in Roanoke and Botetourt counties, represented the mountain; Hol-



liday Lake, 140 acres, located in Buckingham and Appomattox counties and Philpott Reservoir, 2800 acres, located in Patrick, Henry, and Franklin counties represented the piedmont; while Airfield Pond, 200 acres, located in Sussex and Southampton counties represented the coastal plain.

Creel census information was available from all or some of the impoundments from 1951 through December, 1956. A closed season was in effect from March 15 through May 31 east of the Blue Ridge and from January 1 through June 19 west of the Blue Ridge during 1951, 1952, and 1953. Year-round bass fishing in impoundments was permitted statewide after January 1, 1954. Creel census information was tabulated in such a manner as to enable comparison of data from years in which a closed season was in effect with years supporting year-round fishing.

For example, the bass catch per trip actually improved after the initiation of year-round fishing in three of the four reservoirs checked. As may be seen in the accompanying table, the bass catch per trip increased from .07 to .11 at Carvin Cove; from .26 to .31 at Airfield Pond; and from .26 to .32 at Philpott Reservoir. Holliday Lake fishermen experienced a decline in fishing success, however, falling from a high of .52 bass per trip to .23 bass per trip. The total bass catch per acre experienced little change, improving somewhat at Carvin Cove and Airfield Pond and declining slightly at Holliday Lake.

**TABLE:—Comparison of fishing pressure and harvest in years of closed bass season (1951-53) with year-round fishing seasons (1954-56)**

	No. Trips/acre		No. Bass/trip		No. Bass/acre	
	Closed Season	Year-round	Closed Season	Year-round	Closed Season	Year-round
Carvin Cove	14.4	13.7	.07	.11	1.1	1.5
Holliday Lake	17.7	35.9	.52	.23	10.0	8.1
Airfield Pond	11.6	9.5	.26	.31	3.0	3.1
Philpott Res.	....	....	.26	.32	....	....

Fears that year-round fishing would substantially increase fishing pressure failed to materialize. Total fishing pressure dropped at two impoundments and increased at the other. In no instance was it apparent that year-round fishing was responsible for major changes in total fishing pressure. Factors such as the proximity of other fishing waters, weather, human population change, etc. apparently contributed to the observed changes.

Changes in the yearly pattern of fishing pressure were marked and considered highly desirable. Whereas formerly under the "closed season" law it was not uncommon for over half of the total annual fishing pressure to be registered during the first thirty days of the season, fishing pressure was spread out to a much greater degree after the introduction of year-round fishing.

Opinions that year-round fishing would tend to take undue numbers of spawning fish during the formerly closed periods proved unfounded. Actually, the bass catch per trip was higher during other periods of the year

(Continued on page 22)



Research in fish management discloses many factors that are important in managing the fish resource. Gill nets are often used in sampling a fish population.



With more people fishing each year in Virginia, many of our streams and lakes are experiencing heavy pressure from our anglers.



With the year-round open bass season in our impoundments, the fishing pressure is more evenly distributed over the year.



# DIGEST OF VIRGINIA 1957-58

## LICENSE FEES

City resident, to hunt in County where City is wholly located	\$1.00
City resident, to fish in City	1.00
County resident, to hunt and fish	1.00
State resident, to hunt	3.50
State resident, to fish	3.00
State resident, Big Game Stamp, to hunt bear and deer	1.00
National Forest Stamp, to hunt, trap and fish	1.00
Nonresident, to hunt	15.75
Nonresident, to fish	10.00
Nonresident interstate (North Carolina and Virginia) 3 consecutive days to fish in Kerr Reservoir	1.00
Nonresident, 3 consecutive days to fish in public impounded waters, statewide, and in public streams east of the Blue Ridge Mountains not stocked with trout	1.50
Nonresident, Big Game Stamp, to hunt bear and deer	2.50
Special Stamp, to hunt bear and deer in Bath, Bland, Botetourt, Buchanan, Craig, Grayson, Giles, Highland, Rockbridge, Smyth, Tazewell, Washington, Wise and Wythe	1.00
Nonresident in Grayson, Smyth and Wythe	5.00
County resident to trap	3.00
City resident to trap in Warwick and Hampton	3.00
State resident, to trap	7.50
Nonresident, to trap	50.00

License is required to take, capture or kill any wild bird or wild animal except of landowners, their husbands or wives and their children, resident or nonresident, within the boundaries of their own lands.

Licenses may be obtained from the Clerks of the Circuit Courts of the counties or the Corporation Courts of the cities and other authorized agents.

## IT IS UNLAWFUL:

For any person to hunt with firearms while under the influence of any narcotic drug or any other self-administered intoxicant or drug of whatsoever nature. Game Wardens and Sheriffs shall enforce the provisions of this act;

To hunt or kill any wild bird or wild animal, including any predatory or undesirable species, with firearms or other weapon on Sunday;

To hunt deer with dogs west of the Blue Ridge;

To hunt or attempt to kill any species of game after having obtained the day's bag limit or the season's limit during any one day of any one season;

To occupy any baited blind or other baited place for the purpose of taking or attempting to take any wild bird or wild animal or to put out bait or salt for any wild bird or wild animal for the purpose of taking or killing;

To kill or capture any wild bird or wild animal adjacent to any area where a field or forest fire is in progress;

To shoot any game bird or game animal from an automobile or other vehicle;

To hunt or track woodcock or non-migratory game birds or game animals in the snow except that bear and deer may be hunted in the snow and landowners may kill rabbits in the snow on their lands for their own personal use, and foxes may be hunted with dogs, but not with guns, in the snow;

To hunt, capture, possess, transport, ship, sell or attempt to do so, any wild bird or wild animal except as specifically provided by law or regulation; or to destroy or molest the nests, eggs, dens or young of any wild bird or wild animal at any time without a permit, except predatory or undesirable species;

To hunt with either a dog or a gun or be in possession of any firearm (except peace officers and game wardens) in the National Forest during the general closed hunting season;

To have in possession loaded firearms on any public highway unless such person is authorized to hunt on private property on both sides of such highway in counties having a population in excess of four thousand and not in excess of four thousand, five hundred;

To shoot a rifle or pistol at wild birds and wild animals on or over the public inland waters of this State or to carry a loaded rifle or pistol on a boat or other floating device on said public inland waters for the purpose of hunting wild birds and wild animals, except when said rifle or pistol is being transported for this purpose from one point to another unloaded;

To hunt furbearing animals in any county in the daytime with firearms, except during the general open season for hunting game birds and game animals in the county;

To cut den trees (Statewide) or to smoke out raccoons from dens or to fell, cut, mutilate or destroy in any manner any tree which is the den or lair of any wild game in the County of Grayson; or to carry any axe, saw or other tool or instrument used for the purpose of felling, cutting, mutilating or destroying trees while hunting at night in Grayson County;

In CAROLINE County to hunt or shoot any wild bird or wild animal with a rifle larger than twenty-two calibre using in such rifle any ammunition larger than a twenty-two short, twenty-two long, or twenty-two long rifle cartridge. Unlawful to hunt deer in CAROLINE County with a rifle;

To use crossbows or poison arrows at any time for the purpose of hunting wild birds and wild animals;

(Statewide) to hunt or kill big game with a rifle of a calibre less than twenty-three; provided that in the Counties of CHARLES CITY, CHESTERFIELD, ESSEX, HANOVER, ISLE OF WIGHT, NEW KENT, PRINCE GEORGE, SOUTHAMPTON, SURRY, SUSSEX, NANSEMOND and NORFOLK (except that part of the Dismal Swamp in Nansemond and Norfolk Counties located as much as 100 yards from any railroad or public highway, and then only when the rifle is used on a stand elevated not less than 15 feet above the ground), it shall be unlawful to use a rifle of any calibre for the hunting and/or killing of big game;—

To hunt game in the counties of APPOMATTOX and ROCKINGHAM with a rifle larger than a twenty-two (22) calibre;

To chase foxes with dogs in APPOMATTOX County on Sunday;

To hunt in ARLINGTON County;

To have gun or rifle with dog in the daytime in the fields, woods or waters of AUGUSTA, CLARKE, FREDERICK, PAGE, SHENANDOAH and WARREN and in Counties east of the Blue Ridge, EXCEPT in PATRICK, during the general closed season, except where migratory game birds, deer, bear, and fox may be hunted during other periods; and except as to rabbits and squirrels by landowners upon their own lands;

To hunt in BUCHANAN, DICKENSON and TAZEVELL Counties whilst hav-

ing in your possession any axe or saw, without obtaining permission of the landowner;

In CHARLES CITY County to hunt with a rifle of a calibre of more than twenty-two;

To hunt deer with rifle or shotgun loaded with slugs in KING WILLIAM County;

In NORTHUMBERLAND County to hunt with high velocity, long range rifles, shot guns loaded with slugs and pistols or revolvers of a larger calibre than 22 rim fire.

To hunt deer with shotgun, rifle or pistol loaded with slugs in PRINCE GEORGE County;

To shoot any firearm from any boat or other floating device while hunting wild birds and wild animals on the Appomattox River between the mouth of Namozine Creek and Genito bridge or to carry any firearm on a boat or other floating device on said river for the purpose of hunting between the points mentioned, except when such firearm is being transported unloaded;

To have in possession any shotgun or rifle for the purpose of hunting wild birds or wild animals on the water areas, including shores of the sea in ACCOMACK, NORTHAMPTON and PRINCESS ANNE Counties during the closed season on migratory game birds, provided, that this shall not apply to persons holding permits granted by the Executive Director of the Commission authorizing the same, or to persons engaged as officers of the peace, while actually in the performance of their duties as such. For the purpose hereof the word "possession" shall include having a gun for the purpose of hunting wild birds or wild animals in one's boat or other conveyance while in the above mentioned areas;

To shoot any firearm at wild birds or wild animals from any boat or other floating device on the waters of the Blackwater River, Somerton Creek and Nottoway River from Monroe Bridge to the mouth thereof and Lawns Creek dividing Isle of Wight and Surry Counties beginning at Mills Bridge thence northeast six miles to the James River, or to carry any firearm on a boat or other floating device on said waters between the points aforesaid for the purpose of taking wild birds or wild animals, except when such firearm is being transported directly across the said waters unloaded for the purpose of hunting during the open season for hunting deer in that section;

To shoot any firearm at wild birds or wild animals from any boat or other floating device on the waters of the Nottoway River in Sussex County, or to carry any firearm on a boat or a floating device on the said waters for the purpose of taking wild birds or wild animals except when such firearms are being transported directly across the said waters unloaded for the purpose of hunting during the open season in that section for the taking of upland game;

To use dogs for hunting bear, foxes and bobcats during open season for hunting deer in ALLEGHANY, AUGUSTA, BATH, BOTETOURT, CLARKE, FREDERICK, HIGHLAND, PAGE, ROCKBRIDGE, ROCKINGHAM, SHENANDOAH and WARREN Counties, and within the National Forest boundaries.

## WATERFOWL REST DAY ON PAMUNKEY RIVER

During the general open season for taking waterfowl it shall be unlawful to hunt waterfowl on Wednesdays in that part of King William County beginning at West Point, following Rt. #30 to its intersection with Rt. #632, thence on Rt. #632 through Cohoke, Lanesville, Palls, to the intersection with Rt. #629, thence northwardly on Rt. #629 to the intersection with Rt. #618, thence along Rt. #618 to Rt. #360, thence southwardly along Rt. #360 through Manquin to the bridge over the Pamunkey River on Rt. #360, and in that part of Hanover and New Kent counties starting at the bridge across the Pamunkey River on Rt. #360 in Hanover, southwardly along Rt. #360 to the intersection with Rt. #606, thence eastwardly along Rt. #606 and Rt. #609 to Tallysville, thence Rt. #33 from Tallysville through New Kent Court House to West Point.

## WILDLIFE SANCTUARIES

It is unlawful for any person to hunt or shoot within a distance of 750 yards of a wildlife sanctuary located and maintained in the corporate limits of any city of this State.

## LICENSED BLINDS

Any person who hunts migratory waterfowl or shoots in the public waters of this State from a boat, float, raft or other buoyant craft or device nearer to any legally licensed erected stationary blind of another than five hundred yards without the consent of the licensee, except, when in the active pursuit of a visible crippled waterfowl which was legally shot by said person, and any person who shall erect a stationary blind or anchor a floating blind in the public waters nearer to any other licensed blind than five hundred yards without the consent of such licensee shall be deemed guilty of a trespass and the owner thereof may maintain action for damages. The violation of any of the provisions of law or regulation as to hunting migratory waterfowl from blinds permitted in this article shall constitute a misdemeanor and subject the offender to a fine of not less than ten or more than five hundred dollars, or confinement in jail not exceeding twelve months, or both in the discretion of the court or jury trying the case. Furthermore, the trial court shall immediately revoke the license of the blind owner where the offense was committed and he shall not have a similar license during that open season but may be eligible for license thereafter upon the same conditions that would apply to a new applicant. Any blind, license for which has been revoked, shall be destroyed by the former licensee, or game warden.

An erected stationary blind within the meaning of this section shall be a constructed blind of such size and strength, when the blind is constructed over water, that it can be occupied by one or more hunters, or large enough to accommodate a boat or a skiff, and intended for use therefor.

Non-Migratory game birds and game animals may be hunted from half an hour before sunrise to half hour after sunset.

Game birds and game animals may be hunted with a shotgun, which shall not be larger than 10-gauge or capable of holding more than three shells at one loading (2 shells only in the magazine and one shell in the barrel); or with bow and arrow; or with rifle.

Game Tag must be immediately attached at Checking Station to bear, deer and turkey killed.

## OPEN HUNTING SEASONS AND BAG LIMITS

When open date for any species of game bird or game animal falls on Sunday, hunting will not be permitted until following day.

Quail\*, Grouse, Turkeys\*\*, Pheasants\*\*\*:  
West of Blue Ridge and on National Forest ..... November 18-January 10  
East of Blue Ridge ..... November 18-January 20

\*No open season on quail on Gwynn's Island in Mathews County.

\*\*Turkeys—CLOSING DATES exceptions:

Alleghany, Augusta, Bath, Botetourt, Frederick, Highland, Page, Rockbridge, Rockingham, Shenandoah, and that section of Amherst and Nelson



# HUNTING REGULATIONS

Counties lying within the National Forest area ..... December 15  
 Unlawful to hunt turkeys in Bland, Buchanan, Carroll, Charles City, Clarke, Craig, Dickenson, Floyd, Franklin, Giles, Gloucester, Grayson, Greene, Henry, King George, Lancaster, Lee, Loudoun, Madison, Mathews, Montgomery, Middlesex, Norfolk, Northumberland, Patrick, Pittsylvania, Pulaski, Rappahannock, Richmond, Roanoke, Russell, Scott, Tazewell, Smyth, Warren, Washington, Westmoreland, Wise and Wythe Counties.

\*\*\*Pheasant—Unlawful to hunt in Augusta, Madison, Richmond, Shenandoah and Westmoreland except on licensed regulated hunting areas.

**Bag Limits**—Quail, 8 a day, 125 a season; Grouse, 3 a day, 15 a season; Turkey, 1 a day, 2 a season; Pheasant, 4 a day, 20 a season.

**Exceptions**—Turkey: bag limits in Alleghany, Augusta, Bath, Botetourt, Fauquier, Frederick, Highland, James City, New Kent, Page, Rockbridge, Rockingham, Shenandoah, and that section of Amherst and Nelson Counties lying within National Forest area, 1 a day, 1 a season.

## DEER

Lawful to kill male deer with antlers visible at least 2 inches above the hair in any county of this State where there is an open season.

See **Bag Limit**\* (exceptions as to sex, seasons and bag limits).

Unlawful to hunt deer with dogs west of the Blue Ridge and in those sections of NELSON County lying west of Rt. #151, and in AMHERST County lying west of Rt. #29.

When deer are found doing substantial damage to crops or orchards, game warden may issue to owner permit to kill such deer when in act of doing damage. Carcass of deer so killed must be turned over to game warden for delivery to a charitable institution or hospital.

## OPEN SEASONS:

Gun and/or bow and arrow  
 East of Blue Ridge ..... November 18-January 5  
 West of Blue Ridge ..... November 18-23

**BOW AND ARROW** only, (in counties where there is a general open season), 1 a day, 1 a season, either sex ..... October 15-November 1

In that section of AMHERST County west of Route No. 29 and in that section of NELSON County west of Route No. 151 and in Patrick County deer may be hunted only (without use of dogs) ..... November 18-23

**Exceptions**—PRINCESS ANNE, NORFOLK and in that section of NANSEMOND County lying east of a line as follows: beginning at a point on State highway number ten where it intersects the Isle of Wight county line thence along such highway to its intersection with the corporate limits of the city of Suffolk; thence easterly, southerly and westerly with such corporate limits to their intersection with State highway number thirty-two; thence along such highway to its intersection with State highway number thirty-seven; thence along State highway number thirty-seven to the North Carolina line. .... October 1-November 30

**ISLE OF WIGHT** and in that portion of NANSEMOND County to the west of the line established in the foregoing paragraph ..... November 10-January 5

Unlawful to hunt deer in the following counties: Arlington, Bedford, Bland east of highways No. 21 and No. 52, Buchanan, Dickenson, \*Fairfax in that section closed to all hunting, Floyd, Franklin, Giles in that section west of New River, Henry, Loudoun, Montgomery, Northampton, Pittsylvania, Pulaski in that section north of New River, and Wythe County north of Highway No. 11.

**BAG LIMITS:** The lawful bag limit for deer shall be one buck a season, statewide, with the following exceptions:

(a) Any one deer may be taken on the last two days of the open season in Alleghany, Augusta, Bath, Botetourt, Clarke, Craig, Frederick, Giles in that section east of New River, Highland, Page, Roanoke, Rockbridge, Rockingham, Shenandoah and Warren counties.

(b) Any one deer may be taken on the last day of the open season in Carroll, Grayson, Lee, Scott, Smyth south of highway No. 11, Washington south of highway No. 11, Wise, and Wythe south of highway No. 11.

(c) One a day, two a season, one of which may be a doe in Caroline, Culpeper, Essex, Halifax, Hanover, James City, King George, King & Queen, King William, Orange, Spotsylvania, Stafford, Warwick and York counties.

(d) One a day, two a season, one of which may be a doe during the last five days of the season in Dinwiddie, Isle of Wight, Nansemond, Norfolk, Prince George, Princess Anne, Southampton, Surry and Sussex counties.

(e) One a day, two a season, one of which may be a doe on the last day of the season in Amelia, Appomattox, Buckingham, Chesterfield, Cumberland, Greenville, Henrico, Powhatan and Prince Edward counties.

(f) One buck a season in Accomack county except on Parramore Island one deer of either sex may be taken.

(g) One a day, two a season, one of which may be a doe during the last two days of the open season in Charles City and New Kent counties.

(h) One a day, two a season, either sex, may be taken during the open season on the Fort Eustis, Quantico Marine Base and Camp Peary properties.

Lawful to hunt deer either sex with bow and arrow October 15-November 1 except where there is a closed general hunting season on deer.

## BEAR

### OPEN SEASONS:

Gun and/or bow and arrow Statewide ..... November 18-January 5

**EXCEPTIONS:** Bland, Giles, Grayson, Montgomery, Pulaski, Smyth, Tazewell, Washington and Wythe ..... November 5-January 5.

Hunting bear west of the Blue Ridge Mountains in counties having an open season for hunting deer is prohibited November 18-23 inclusive, except in the counties of Bland, Giles, Grayson, Montgomery, Pulaski, Smyth, Tazewell, Washington and Wythe bear may be hunted without the aid of dogs during this period.

Princess Anne, Norfolk and that portion of Nansemond County lying east of a line as follows: beginning at a point on State highway number ten where it intersects the Isle of Wight County line, thence along such highway to its intersection with the corporate limits of the city of Suffolk; thence easterly, southerly, and westerly with such corporate limits to their intersection with State highway number thirty-two; thence along such highway number to its intersection with State highway number thirty-seven; thence along State highway number thirty-seven to the North Carolina line. .... October 1-November 30. Isle of Wight and in that portion of Nansemond County to the west of the line established in the foregoing paragraph ..... November 10-January 5  
 To trap, Statewide ..... November 15-December 31

**Bag Limit**—One bear a season (trap and/or hunt).

Legal bear not less than 75 pounds live weight.

## FOX

### OPEN SEASONS:

Hunt with dogs, Statewide.

September 1-August 31

### Exceptions:

Amelia unlawful, daytime only ..... April 1-September 1

City of Warwick ..... October 1-January 20

Clarke, \*Fairfax, Fauquier, Loudoun, Rappahannock September 1-March 31

Foxes may not be hunted with dogs in Clarke County during the deer season.

### Hunt with guns:

East of Blue Ridge ..... October 1-January 20

West of Blue Ridge ..... November 18-January 10

### Exceptions:

(a) Open season on all National Forest lands ..... November 18-January 10

(b) Except in Tazewell, season closes ..... January 20

(c) Buchanan ..... October 15-January 31

(d) Chesterfield, (greys), Franklin, Grayson, Patrick, Pittsylvania ..... November 18-January 31

(e) Frederick, hunt with gun and/or dog, regardless of snow ..... November 1-February 28

(f) Chesterfield, King and Queen, Red fox, continuous open season with gun and/or dogs.

(g) Lunenburg ..... October 1-January 31

(h) Rockingham ..... October 1-March 31

(i) Scott, Washington and Wythe ..... October 1-February 28

(j) Richmond and Rockbridge Counties continues open season.

(k) Unlawful to shoot foxes in Albemarle, Amelia, Amherst (except in National Forest area), Appomattox, Charlotte, Clarke, Culpeper, Dinwiddie (Darville District only), Fauquier, Halifax (except on regularly organized game preserves), James City, Loudoun, Louisa, Nottoway (except Red foxes), and Rappahannock.

(l) Lawful to hunt Red foxes in Middlesex and Nottoway Counties ..... October 1-January 31

(m) King George and Prince Edward ..... November 18-January 20

(n) Stafford—unlawful to shoot foxes from ..... October 1-January 31

(o) Owner or tenant may kill or have killed foxes at any time on his own land or land under his control.

### TRAP:

Unlawful to trap foxes with steel traps except when done on land by owner, members of his or her household, tenants, or those having permission to do so from the landowner or his or her agent.

**Open Season:** Statewide ..... November 15-January 31

### Exceptions:

Albemarle ..... November 1-November 30

Buchanan, Richmond ..... Continuous open season

Nelson ..... November 1-January 20

Trapping foxes in Clarke, Fauquier, Loudoun and Rappahannock prohibited.

## MINK, OPOSSUM AND RACCOON\*

### OPEN SEASONS:

Statewide to hunt opossum and raccoon ..... October 15-January 31

### Exceptions:

National Forest area ..... November 18-January 10

Essex, continuous open season on raccoon.

\*Raccoon may be hunted in the counties of Accomack, Amelia, Appomattox, Brunswick, Buckingham, Campbell, Caroline, Charles City, Charlotte, Chesterfield, Cumberland, Dinwiddie, Fluvanna, Goochland, Gloucester, Greenville, Halifax, Hanover, Henrico, Isle of Wight, James City, King George, King and Queen, King William, Lancaster, Louisa, Lunenburg, Mathews, Mecklenburg, Middlesex, Nansemond, New Kent, Norfolk, Northampton, Northumberland, Nottoway, Powhatan, Prince Edward, Prince George, Princess Anne, Richmond, Southampton, Spotsylvania, Stafford, Surry, Sussex, Westmoreland and York and in the cities of Warwick and Hampton ..... October 1-January 31.

Statewide to hunt and trap mink ..... December 15-January 31

Statewide to trap Opossum ..... December 1-January 31

### Statewide to trap:

\*Raccoon (closed season) except in the counties of Accomack, Amelia, Appomattox, Buckingham, Brunswick, Caroline, Charles City, Cumberland, Dinwiddie, Gloucester, Greenville, Halifax, Isle of Wight, James City, King George, King William, Lancaster, Lunenburg, Mathews, Mecklenburg, Middlesex, Nansemond, New Kent, Norfolk, Northampton, Northumberland, Nottoway, Powhatan, Prince Edward, Prince George, Princess Anne, Richmond, Southampton, Surry, Sussex, Westmoreland, York and in the cities of Hampton and Warwick ..... December 15-January 31

Essex and King and Queen, trap raccoons ..... January 1-March 15

**Bag Limits**—Opossum and mink: NONE. Raccoon, 3 a day, 20 a season, except west of Blue Ridge Mountains, 2 a day, 12 a season; Scott County, 1 a day, 3 a season; individual or organized hunt.

## RABBITS

### Open season to hunt:

East of Blue Ridge ..... November 18-January 20

West of Blue Ridge ..... November 18-January 10

### Open season to trap:

Statewide ..... November 15-January 31

**Bag Limit:** Total 6 a day, 75 a season (hunt and/or trap.)

## MUSKRAT AND OTTER

### OPEN SEASON—To hunt

To trap otter ..... none

To trap muskrats ..... December 15-February 28

To trap muskrats ..... January 1-March 15

**No Bag Limit.**

## BEAVER

### OPEN SEASON—To hunt

To trap ..... none

To trap ..... By special permit to landowners

## SQUIRRELS

### OPEN SEASON:

East of Blue Ridge ..... November 18-January 20

West of Blue Ridge and National Forest areas ..... November 18-January 10

**EXCEPTIONS:** Accomack, Amherst, Bedford, Culpeper, \*Fairfax, Fauquier, Isle of Wight, Loudoun, Madison, Nansemond, Norfolk, Northampton, Stafford ..... October 1-15 and November 18-January 20

Albemarle, Greene, Greenville.

Southampton ..... September 1-15 and November 18-January 20  
Bland, Dickenson, Lee, Montgomery, Pulaski, Russell, Smyth, Tazewell, Wash-  
ington, Wise, Wythe ..... September 15-30 and November 18-January 10  
Botetourt, Clarke, Craig, Frederick, Page, Roanoke, Rockingham, Shenandoah,  
Warren ..... October 1-15 and November 18-January 10  
Buchanan ..... September 1-30 and November 18-January 5  
Carroll, Floyd, Franklin, Henry, Patrick ..... September 1-January 20  
Giles, Grayson ..... September 15-October 15 and November 18-January 1  
Scott ..... September 15-30 and November 18-January 5  
Bag Limit—6 a day, 75 a season.

**TRAPPING SQUIRRELS IS UNLAWFUL.**

#### ELK

Statewide, closed season.

#### BIG LEVELS WILDLIFE MANAGEMENT AREA

The opening date for the general hunting season on the Big Levels Wildlife Management Area will conform to the general opening date for the area West of the Blue Ridge Mountains. The deer, bear and small game seasons and bag limits will conform to the season and bag limits in the surrounding counties with the following EXCEPTIONS:

1. NO TURKEY HUNTING AT ANY TIME.
2. Bear hunting with dogs November 25-December 14, 1957.
3. Hunting for deer, bear and small game (except wild turkey) with bow and arrow only ..... November 1-16.
4. No night hunting and no dogs permitted prior to November 25. NO HUNTING OF ANY KIND AFTER DECEMBER 14.
5. No trapping on the Big Levels Area at any time.

\*FAIRFAX COUNTY: It shall be unlawful to hunt in Fairfax County at any time in the following described areas:

"Beginning at the intersection of the Arlington-Fairfax County boundary line with the southeasterly bank of the Potomac River; thence with the said bank of the Potomac River in a northwesterly direction to the mouth of Difficult Run; thence with the center of Difficult Run in a southerly direction to Lee Highway (U. S. Routes 29-211) on its south side; thence with the south side of the said Lee Highway to Shirley Gate Road (Route 655); thence with the west side of the said Shirley Gate Road in a southerly direction to its intersection with the south side of the Braddock Road (Route 620); thence with the south side of the said Braddock Road in an easterly direction to its intersection with the east bank of Accotink Creek; thence with the easterly bank of the said Accotink Creek in a southerly direction to Accotink Bay; thence with the east shore line of Accotink Bay and continuing with the northerly shore line of Gunston Cove to the Potomac River; thence with the westerly shore line of the Potomac River in a northerly direction to the southerly shore of Hunting Creek; thence with said shore line to the Fairfax County-City of Alexandria boundary line; thence with the said boundary line to its intersection with the Arlington County boundary line; thence with the Arlington County boundary line in a northwesterly direction to its intersection with the Fairfax County-City of Falls Church boundary line; thence with said boundary line to its intersection with the Arlington County-Fairfax County boundary line; thence in a northeasterly direction with said boundary line to the point and place of beginning. Provided, however, that hunting of waterfowl only from shore blinds along the Potomac River from Hunting Creek to Accotink Bay shall be lawful during the open season therefor."

#### COMMISSION OF GAME AND INLAND FISHERIES

Beverly W. Stras, Jr., Chairman

#### QUANTICO MARINE RESERVATION

The seasons and bag limits (except deer) for hunting wild game birds and wild game animals within the Reservation shall conform with the general open hunting seasons East of the Blue Ridge Mountains.

#### NATIONAL FORESTS

Unlawful to hunt with either gun or dog or have in possession or in car any uncased firearm during general closed hunting season, except with bow and arrow only, for deer ..... October 15-November 1.

#### NATIONAL PARKS

National Parks are wildlife sanctuaries; hunting and possession of firearms in these areas prohibited by Federal Regulation.

#### STATE FORESTS

Should there be an open season on any species of game bird or game animal, announcement will be made on or before November 1, 1957.

#### STEEL TRAPS

Unlawful to trap with steel traps except when done on land by its owner, members of his household, tenants, or those having permission to do so from landowner or his agent. Traps of any kind set on the lands or waters of another shall have attached the name and address of the trapper thereto.

Unlawful to set steel bear traps in Nansemond, Norfolk and Princess Anne Counties.

**Note**—Should an emergency arise with reference to any species of game bird or game animal during the open season provided herein, the Commission reserves authority to curtail or close entirely the season on such species.

Copy of Migratory Game Bird Regulations will be released to the Press and otherwise when they become available from the U. S. Fish and Wildlife Service.

#### COUNTRY SQUIRREL

(Continued from page 13)

flourish. Animals need room, too, just like plants."

She stopped digging to look up at him. "Your father pumped you full of all that stuff, didn't he?"

"Yes, and my teacher at school did, too. This year we had some lectures on conservation, and this man came and told us about carrying capacity and all that. You see there are only so many oak trees in that wood, and their nuts can only feed so many squirrels."

Mary set down her trowel and hugged her knees. "All right, go on," she said.

As the small boy told her what he had learned at school and what he had observed his father doing, she listened intently.

"I'm sorry, I didn't mean to make a speech," he broke off finally.

"Don't be sorry; it was a nice speech," she told him. "You know, sometimes you kids can teach us grown-ups things . . . we grown-ups tend to think we know everything, but . . . well. . . ."

"That's all right," Tommy said generously. "My dad says you'll learn."

"I wonder," Mary said slowly, "I wonder if I could ever learn how to cook a squirrel pie. Do you think I could, Tommy?"

#### ALL FISHED OUT???

(Continued from page 19)

than during the spring spawning months. Likewise, extensive population studies involving netting, seining and rotenone samples revealed ample brood fish at all times. Reproduction was excellent at all impoundments throughout the study period.

The size composition of the bass catch revealed major changes following the inception of year-round fishing. Bass caught during the spring months formerly closed to fishing averaged much larger than those caught during the "open season."

This was considered an added bonus to fishing pleasure and undoubtedly exerted a favorable influence on the fish population as well by removing the formerly unharvested "lunkers."

Summarizing briefly, year-round fishing did not affect, adversely, bass fishing success or total bass harvest. The bass catch per unit effort increased at three reservoirs, which at the same time experienced a moderate decline in total fishing pressure, while the catch per unit effort dropped at the remaining experimental pond in which total fishing pressure almost doubled. Thus, it appeared that bass fishing success was better correlated with total fishing pressure than with the presence or absence of a closed season.

While year-round fishing appeared to exert little or no influence on the total fishing pressure, it did spread out fishing over the entire year and eliminated the usual "opening day rush." In addition, a large number of "lunker" bass were harvested during the spring season, which was formerly closed to fishing. This spring harvest of "lunker" bass appeared to be an added bonus to the fishermen and did not result in any decline in the normal number of large bass removed later in the season.

No perceptible change in growth rates, reproduction, or relative species abundance attributable to the liberalization of fishing regulations was noted at any time during the study period.

It seems apparent that the action taken in removing "closed season" restrictions was well founded and in line with the Commission's over-all policy of providing Virginia anglers maximum fishing opportunity commensurate with sound conservation precepts.



# VIRGINIA WILDLIFE 1957 SUBSCRIPTION DRIVE

SEVEN thousand two hundred eighty-one subscriptions were sold this year to *Virginia Wildlife*, monthly magazine of the Game Commission, in the annual contest for the law enforcement personnel, according to Florence Blankenship, chief of the circulation section. Since last year, the magazine has increased its circulation by 11,500, bringing the total number of subscriptions to 35,500.

For the past three years, conservation-minded organizations, sporting goods merchants and clubs have been offering prizes to the most successful salesmen in the subscription drive. This year's big winner is conservation officer Harry King, of Patrick Henry District, who sold 852 subscriptions. He had the choice of either a trip to the Southeastern Association of Game and Fish Commissioners conference this fall or a Remington Powermatic shotgun. The money to purchase the gun was donated by Virginia Wildlife Federation, New Kent Road, Safety and Legal Hunters Association, Spruance Anglers' Club in Chesterfield County, Blue Ridge Fish and Game Association of Roanoke County, Buggs Island Club, Clarksville, the Richmond chapter of the Izaak Walton League, and Ted Clarke's Sporting Goods Store, Hopewell, Virginia. Also, the Virginia Athletic Company of Petersburg, Virginia, McQuinn's Sporting Goods Store in Arlington, Virginia, and Green Springs-Cleveland Wildlife Association contributed towards the grand prize.

Competition between districts was very keen this year. Notable is the response and loyalty of the sportsmen's clubs in supporting the game wardens in their districts. The enthusiasm of the hunters and fishermen is always conducive towards making the contest a vigorous campaign.

For the third consecutive year, Patrick Henry District won first place in subscription sales, and Supervisor R. S. Purks led the George Washington District in second place. Both districts had 100% participation in the drive. Top winner for the supervisors was I. H. Vassar, who is supervisor for Patrick Henry District; F. M. Fenderson, of Petersburg, led the game warden contestants. Their prize is a three-day trip to attend the Southeastern Association of Game and Fish Commissioners conference in Mobile.

All the prizes were awarded on a point system, new subscriptions counting more than renewals, and three-

year new subscriptions getting more points than one or two-year subscriptions. The drive began on the first of April and extended through the first of July.

Other winners and prizes awarded with the names of the donors are as follows:

Supervisor R. S. Purks—22 Stevens Automatic Rifle, donated by A. C. Ford, Richmond

Warden Gene Altman, Fauquier County—Ice Chest, donated by Vincent's, Arlington

Warden W. W. Richardson, Bland County—Spinning rod, donated by Carl A. Ahalt, Arlington

Warden Wm. T. Jamison, Giles County—Hunting Knife, donated by Dixie Sporting Goods, Alexandria

Warden Robert Griffith, New Kent County—Tackle Box, donated by Ed. H. Collins, Fairfax

Warden Fred Brown, Fairfax County—Gift certificate, donated by Yeatman & Sons, Arlington

Warden Cameron Munden, Princess Anne Co.—Gift certificate, donated by Northrop's, Norfolk

Warden Garland Foster, Prince George Co.—Badminton set, donated by A. M. Clotzman, Arlington

Warden R. E. Wilfong, Rockingham Co.—Hunting knife, donated by H. E. Brown, Falls Church

Warden Charlie Hunter, Surry County—Gift certificate, donated by Sportsman's Shop, Norfolk

Warden G. C. Wilson, York Co.—Gift certificate, donated by Tidewater Marine, Newport News

Warden D. A. Ferrell, Stafford Co.—Ocean Spray Reel, donated by J. F. Thomas, Arlington

Warden Donald Zepp, King George Co.—Flashlight, donated by H. H. England, McLean

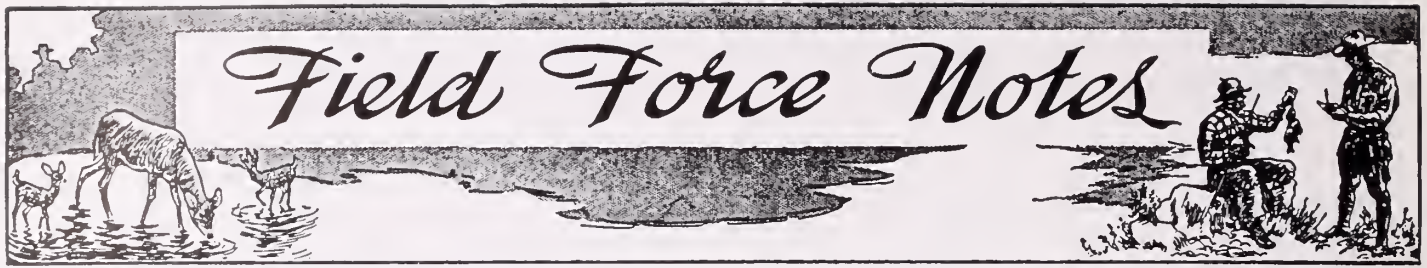
Warden W. W. Shields, Bedford Co.—Hunting Jacket, donated by Owens Weaver, Roanoke

Warden Shelton Rountree, Nansemond Co.—Thermos jug, donated by Arthur Molle, Arlington

Warden Ralph Austin, Halifax Co.—Car compass, donated by Sportsman Shop, Richmond

Warden D. A. Conner, Appomattox Co.—Gift certificate donated by Colonial Heights Sports Shop, Colonial Heights

Warden A. E. Cole, Halifax Co.—Garden hose, donated by Ken McPhail, Inc., Vienna



### **160-Pound Buck Killed by Dogs**

A pitiful sight is a defenseless animal against a pack of stray dogs. Such was the picture in Powhatan County when a six-point buck was chased until he dropped from exhaustion in the James River. The vicious dogs retrieved him and chewed and mangled him until he died. He weighed about 160 pounds.

John Redd, district game biologist, and McGuire Morris, game warden, brought in the antlers of the unfortunate animal. The antlers were in the "velvet" stage, which is that period of growth when they are developing and covered with a delicate, vascular membrane. This felt-weight, fuzzy covering eventually separates from the hard structure underneath and wears off or is more likely to be rubbed off by the deer itself. Shedding of the velvet takes place in the late summer and fall, after which the mature antlers are then no longer sensitive or easily injured.

### **Game Biologist Assigned to Commission**

Allen R. Stickley, Jr., graduate of George Washington University with a science degree and an M.S. graduate in wildlife conservation from Virginia



Photo by Henry S. Mosby

The most recent game biologist hired by the Commission is Allen R. Stickley, Jr. The bulk of his work will be directed toward the black bear.

Polytechnic Institute, has joined the Commission of Game and Inland Fisheries as a game biologist. Stickley will be assigned to the study of the black bear and will devote considerable time to a study of the Virginia white-tailed deer and the wild turkey.

### **Keep Dismal Swamp Wild**

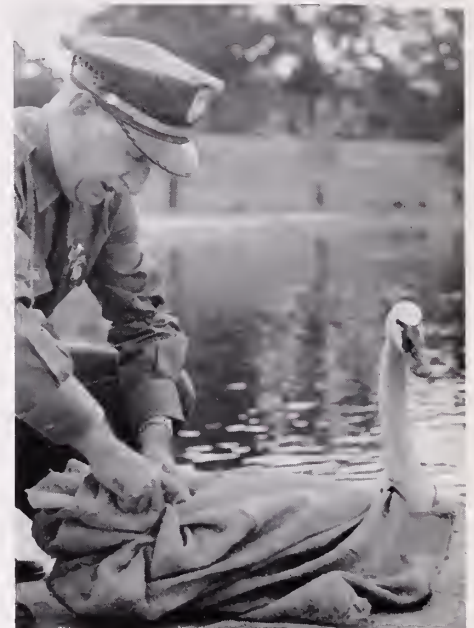
To a proposed recreational development on the edge of Dismal Swamp, I. T. Quinn, executive director of the Commission of Game and Inland Fisheries, as a conservationist, is on the opposing side. The county board of supervisors of Norfolk County has received an application from two Elizabeth City men for lease of a strip of property along the Lake Drummond feeder ditch, intended for a hotel, sightseeing canals and gardens.

Sportsmen have called the Great Dismal Swamp a sportsman's paradise, and wildlife and game management authorities have declared that no other stretch of wild land in the United States offers greater potentialities for scientific investigation, development and management. Certainly, any encroachment on its wildness, however small, would represent a loss that is irreplaceable in the United States today, with its mercenary desire for exploitation.

Much of the 750 square miles of dense, swampy forest is privately owned, and government officials and conservation groups are limited in their authority to impose any restrictions. It would seem that public opinion when directed intelligently would persuade any materialists to preserve the swamp in its natural state. The civilized world needs this primitive country as an outdoor laboratory. For educational purposes, it should be left alone.

### **Whistling Swan Grounded in Virginia**

Added to the collection of domestic



Richmond Newspapers Photo

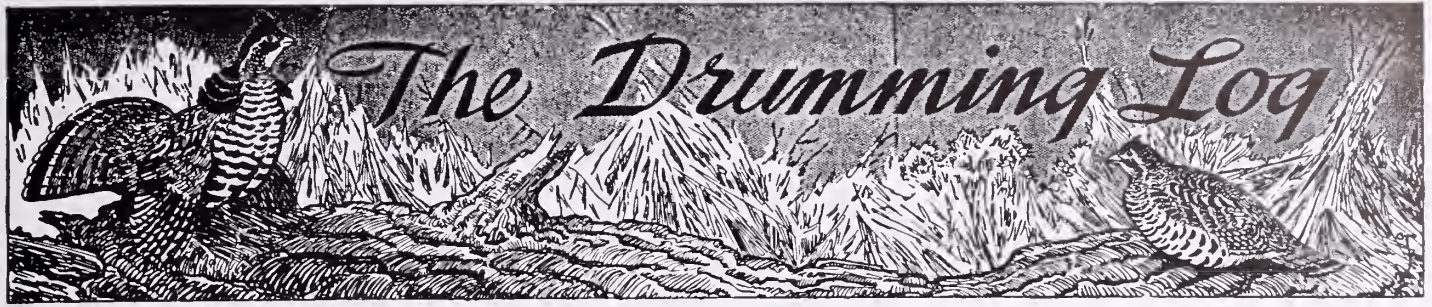
Julian Hill, game warden for the city of Richmond, makes preparations to release "Lucy Lockett" on Swan Lake.

swans at Byrd Park, is Lucy Lockett, a whistling swan (*Cygnus columbianus*), captured by game warden H. H. Pittman, in Lancaster County. The wild swan's wings had been clipped by some inhumane person. Among our waterfowl this species ranks second only to the trumpeter swan (*Cygnus buccinator*).

Swans pair for life, and once mated, never separate. The breeding grounds are so remote and the birds so wary and shy that only by force and inability to fly would one stay in civilization. In the spring they wing their way to the frozen north, near Siberia on the Bering Sea, in the vicinity of St. Michael, Alaska. But each year about 200 are found crushed to death by the treacherous Niagara Falls where they get trapped in their northward flight.

The cygnets are able to leave their nests by the first week in July, and fly by the middle of September. When they migrate in October, as many as 500 may form in a single line to take their long, silent trek south.





### **Forest Fires Hit Record Low in 1956**

Although there were more visitors to forest lands in the U. S. last year, fewer fires were reported than ever before. The Department of Agriculture disclosed that despite this encouraging news, the percentage of forest fires was still critically high, as a forest fire was started every three and a half minutes in 1956.

Man-caused fires dropped five percent, due largely to organized prevention campaigns carried on by federal and state agencies, industries, private organizations, and individuals. Most popular of these are the Smokey Bear campaign, conducted by the Forest Service and state foresters under sponsorship of the Advertising Council, and Keep Green programs conducted by the states and forest services.

The South received special praise for considerable improvement in its forest fire protection. The education of the South was attributed to the Southern Forest Fire Conference of 1955 and followup meetings in each state at which fire fighting agencies, law enforcement departments, and other groups planned a campaign to protect woodlands from fire.

### **VPI Entomologists Foresee Locust Plague in Virginia**

The 17-year locust, scientifically known as the "periodical cicada," is expected to reappear in Virginia this year for the first time in abundance since 1940, although a few of the species have emerged in the intervening years. Entomologists at Virginia Polytechnic Institute say the insect, with its characteristic reddish tinge and black marking resembling a "W" on the lower margin of the front wing, is more inclined to a mountainous habitat, particularly in Rockingham and Frederick counties.

Several superstitions prevail about the cicada. The "W" on the wings is supposed to foretell a war. Another one is that if one is stung by a cicada, his life is endangered. (Actually, the insect cannot sting.) A rather cryptic saying concerning the cicada is "happy is the cicada for his wife has no voice!"

Control of the cicada is possible if trees are sprayed when the insects are not likely to be flying, which would be in the cool of the day or at night. The entomologists suggest using 40% tetraethyl pyrophosphate at the rate of 4 ounces per 100 gallons of spray; or 100% hexaethyl tetraphosphate, which has been used at varying rates of 6 ounces to one pint with good results. However, as phosphatic sprays are highly toxic to animals, extreme caution must be taken when applying.

### **Raising Worms for Bait**

Wildlife management specialists at V. P. I. suggest an easy remedy for the problem of finding fish bait. Raising worms in the back yard is a simple project, and whenever there is an urge to go fishing, there would be no need to waste time finding bait. An ordinary wash tub filled with the proper soil and buried in the ground should yield plenty of fish worms. Fifty to 100 worms are enough to start a tub-sized worm bed. English redworms or "red wigglers" are preferred. The tub should rise three or four inches above ground level, but proper drainage must be provided by a two-inch hole in the bottom of the tub covered with a copper mesh wire. Food for the worms is in the soil itself, (a fine clay loam containing lots of humus or well decomposed organic matter), and leaves from celery, lettuce, cabbage, turnips and other vegetables, worked into the topsoil, will be taken readily.

### **Soil Conservation Service Aids Farm Pond Construction**

Hunter Sheppe, purchasing agent and keeper of records and reports for the regional office of the Soil Conservation Service, disclosed statistics on farm ponds built in the United States and her possessions through 1956. Within the boundaries of Virginia, Sheppe said that 15,142 farm ponds were built with the aid of the Soil Conservation Service. In the United States, including Hawaii and Puerto Rico, 833,592 farm ponds were constructed, with the help of Soil Conservation Service agents.



Aycock Brown Photo  
Mrs. Ross Walker, Richmond, Virginia, proudly displays her 415-pound marlin caught off Hatteras.

### **Bald Eagles Nesting**

D. H. McIntosh of the Robert E. Lee Council, the Boy Scouts of Richmond, reports that he observed between the mouth of the Chickahominy and Turkey Island eighteen bald eagles. Several scout leaders on a cruise from Richmond to Jamestown with their wives said that four to six nesting pairs of birds were seen.



### **Fishery Research Contracts Awarded**

The Fish and Wildlife Service of the Department of the Interior has awarded seventeen contracts for research, biological investigations, and economic studies.

The projects are part of the continuing programs conducted by the Department's Fish and Wildlife Service to assure a sustained supply of fish and to provide for better utilization of fish and fishery products. Money for these contracts was provided through the Saltonstall-Kennedy Act, which makes available a portion of foreign fisheries import duties to carry out research on means of strengthening the American fishing industry.

In some of the contracts, fishery biologists seek data which would help the Fish and Wildlife Service guard against over-use of a resource. Other contracts would help them to predict fluctuations in fish populations or perhaps eliminate or modify the fluctuations. Other purposes are to deal with fishery economics and certain conditions which affect the systematic harvesting of a resource. There are contracts, too, that relate to the "atoms for peace" program by studying the use of radiation in fish preservation while there are to be chemical studies of fish oils which may result in new uses for these oils.

### **Virginia Fishin' Hole**

From the Sport Fishing Institute, the *Bulletin* indicates the kindling of interest in sport fishing down in "ole Virginny." Fish biologist W. H. Massmann, at the Virginia Fisheries Laboratory at Gloucester Point, estimates that there are more than 1,274,000 acres of tidal waters in the portion of Chesapeake Bay and its tributaries lying within Virginia. In the last survey, which was in 1954, these waters produced about 109 pounds per acre of commercial fish. Clams, oysters, and crabs brought about \$17 per acre. Although the harvest will probably fall short of the figure for 1954, (if an account were made today) the public relations department already is doing an excellent job of presenting the potential values of sport fishing in Virginia.

### **Beaver Colony in Orange County**

Busy beavers on the farm of Mrs. Charles S. Vernon, Jr., near Daniel in Orange County, backed up the water until it was fourteen feet deep, as is shown in the picture.



Beavers construct a dam so that suitable habitat will be available for their normal living activities. This dam is located near Daniel in Orange County.

As a result of a restocking program by the Commission, these interesting animals have become rather well established in the state, although they were totally extinct up to about twenty-five years ago. At times, they become a nuisance, but they frequently improve conditions for fish by the creation of these small ponds. Also, the beaver is strictly a vegetarian and will not harm the fish.

### **Quail Conservationist**

In the Bad River area of South Dakota, there lives a true "Johnny Appleseed," Lloyd "Mike" Longnecker, who has taken up quail conservation as a hobby. According to him, this country has the best natural cover for quail of any of the surrounding states, including the federal and state parks, but there are not enough quail to support a hunting season. However, to Longnecker, it has the greatest hope for preservation of one of nature's remaining untarnished areas for wildlife.

The quail of the Bad River area has only two enemies, Longnecker says—man and cats. The greatest problem confronting the comeback of the quail is the abundance of the

half-wild domestic cats and Longnecker suggests that, to protect the quail, bells should be put on the cats.

A famous conservationist, Longnecker speaks to high-school assemblies and civic organizations and has many letters testifying to the interest and educational aspects of his hobby. The education division of the Virginia Game Commission has received an enthusiastic and informative booklet from Longnecker along with a request for information on Virginia's quail program.

### **44-Inch Copperheads**

J. M. Ittner, special game warden for Chesterfield County, was surprised in his own back yard by a visit from two 44-inch copperheads. He killed the first one with his power lawn mower and dispatched the other with his shotgun. The average length of a copperhead is 2½ feet. They are chunky and powerful. These two, however, were unusually large for this species of snake.

### **Turkey Data Still Desired**

District game biologist Jack Gwynn wishes to express his thanks to the many people over the state who have taken the time to send in brood and nest reports on the wild turkey. Approximately 100 reports had been received by July 31 and over half of these were suitable for use in the biological study of this fine game bird.

It is important to obtain data, especially on brood sizes, during the month of September. If this popular game species is to be managed properly, the biologists must have a clear picture of the population throughout the year. It is through the fine cooperation displayed thus far that a clear picture of the summer and fall population will be seen.

Gwynn hopes that he will continue to receive reports through the month of September. Perhaps some of you fine sportsmen have made observations of turkey nests or broods and failed to report them. Do yourselves and the turkeys a favor and send in this information immediately. If additional report cards are needed, they may be obtained from Jack Gwynn at 2503 Brunswick Road, Charlottesville, Virginia.



# Wildlife Questions and Answers

**Ques.:** What is the best method for keeping fish in a freezer? My family does a great deal of fishing and we have tried in the past to keep our catch frozen. Often the fish seem to dry out.

**Ans.:** If fish are to be eaten within a two-months period, they can be frozen like other meats. Wrap them in freezer paper and freeze as quickly as possible. If fish are to be kept for longer periods, then they should be "glazed." To glaze a fish, first freeze it for at least 48 hours. Then dip the frozen fish in water for approximately one minute. After the excess water drips off, return the fish to the freezer. Continue this process until a visible film of ice completely coats the fish. This allows the ice, rather than the moisture from the fish, to evaporate. The glaze should be renewed every three months. Certain fish cannot be kept for long periods in this manner because, even in a frozen condition, they develop a stale or rancid flavor.

**Ques.:** Is it true that shellac is made from an insect?

**Ans.:** No, not from the insect itself. The lac insect, when feeding upon various plants, secretes a waxy substance, which forms up to one-half inch thick on twigs. These encrusted twigs are collected and the secretion is refined into shellac. The lac insect occurs in India, Burma, Formosa, the Philippine Islands and adjacent areas. There is approximately four million pounds of shellac produced each year.

**Ques.:** What type of spray is best to use in controlling honeysuckle?

**Ans.:** There are two methods for controlling honeysuckle as prescribed by the Southeastern Forest Experiment Station, Asheville, North Carolina: (1) Spray foliage with four gallons per acre of butoxy ethanol ester of 2, 4-D and 2, 4, 5-T, 2:1 ratio, in 250 gallons of water early in the summer. Repeat treatment later in the summer when sprouting recurs, using a lower volume of the same concentration. (2) Spray foliage with ten pounds per acre of 50 percent 3-amino-1, 2, 4-triazole wettable powder (Weedazol or its equivalent) in 125 gallons of water early in the summer. Repeat treatment later in the summer or the following spring when foliage again turns green, using a lower volume of the same concentration.

**Ques.:** Is color an important factor in identifying various species of fish?

**Ans.:** Color is often used in fish identification, but it is not a reliable factor. The color of a fish is determined to a great extent by the food eaten. Color varies a great deal in various sections of the country and may even vary in the same body of water.

**Ques.:** What is meant by the term "rough fish"? In many articles by fish technicians this term often appears.

**Ans.:** Rough fish are usually considered to include any freshwater fish that are not valuable for food or sport. Species usually included in this group are the carp, bullhead catfish and suckers.



"What a fish! I'm telling you fellers . . . Oh, hello Reverend . . . It was just a little one, so I tossed it back . . ."

**Ques.:** When were the first English sparrows introduced into the United States? Were they brought here for a definite purpose?

**Ans.:** The first introduction of this bird was in the year 1850. At that time eight pairs were released in Brooklyn to help control the cankerworm. The English sparrow is a good example of an exotic that has done too well in our country.

**Ques.:** Is there such a thing as a sea snake? A fellow worker was talking of snakes found in salt water and, to me, it seems a little far fetched.

**Ans.:** There are snakes that inhabit salt water. To date none of these snakes have been found in the Atlantic. All specimens that have been collected belong to a single family, *Hydrophidae*. This family is somewhat related to the family of cobras and, therefore, the sea snakes are poisonous.

**Ques.:** What is the highest price that has ever been paid for an animal hide in the United States?

**Ans.:** Perhaps the highest price that has ever been paid for a fur in this country was the fantastic sum of \$11,000 for a platinum fox pelt. This amount was paid when the new strain of the silver fox was first introduced on the American fur market.

**Ques.:** Many of the articles on fish management now speak of "fin clipping" as a method of marking fish. Are many fish lost as a result of this type marking?

**Ans.:** New Hampshire recently ran a test to determine the mortality resulting from fin clipping. One group of 450 salmon were fin clipped and held for observation for two weeks. None of these individuals were lost. Later, 4,550 of these fish were given the same treatment and, after nine days, only two fish had died. It appears that this method of marking has no harmful effects when conducted by experienced personnel.

**Ques.:** Can you please tell me what causes the roaring sound when a conch shell is held to the ear?

**Ans.:** The same sound heard in a conch shell can also be heard in a milk bottle, water glass or by cupping the hands over the ear. As a result of the object near the ear, existing outside sounds, particularly those of a low vibration range, are amplified.

**Ques.:** What is the most dangerous animal in the world?

**Ans.:** The house fly is probably the most dangerous member of the animal kingdom. A recent book on insects lists the house fly and its relatives as possible transmitters of approximately thirty diseases and parasites. Some of these are among the most serious known to medical science.

**Ques.:** Is there any method for breaking up starling roosts?

**Ans.:** Many techniques have been used for controlling this bird. Until recently no single method proved very satisfactory. Experiments conducted at Pennsylvania State College recently have turned up a method which seems to break up starling roosts. It was found that if starlings were held by the wings or legs, they emitted shrieks of protest. These calls were recorded and broadcast over a loudspeaker near roosting sites. This method has been very successful in breaking up roosts containing thousands of birds.

That puddle ducks, like the mallard, "jump" into the air but divers such as the scaup must make a running take off?

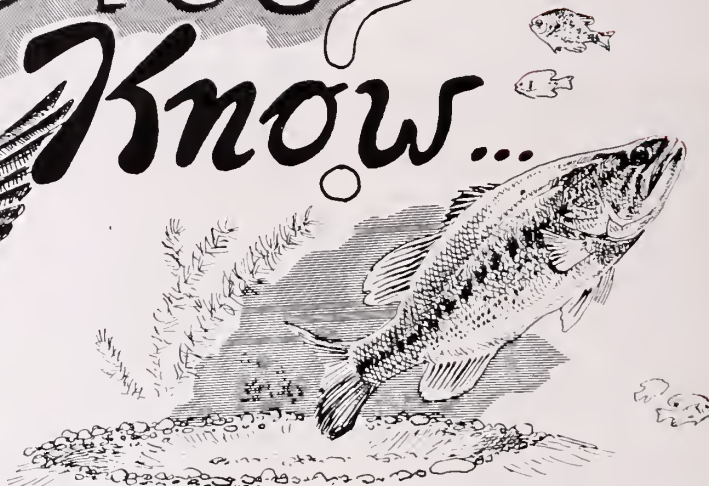
# DID YOU Know...



That the number of spikes on a deer's rack and the number of "buttons" on a rattler's tail do not necessarily indicate the age of the individual?



That you will have more quail if you "plant in the spring where you hunt in the fall"?

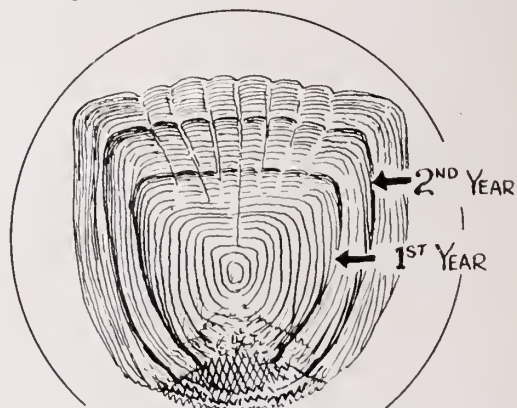


That it's the male bass that builds and guards the nest?



That most forest fires are started by careless people and that they constitute one of wildlife's greatest enemies?

DRAVER



That the age of most fish can be determined from careful microscopic examination of their scales?